

Manufacturers Record

Exponent of America



\$6.50 per Year.
Single Copy, 20 Cents.

Baltimore, Md.
AUGUST 30, 1923

The Right to Work by Americans as Seen by Three Presidents.

President Woodrow Wilson

"I am a fierce partisan of the open shop and of everything that makes for individual liberty, and I should like to contribute anything that might be possible for me to contribute to the clarification of thinking and the formation of right purposes in matters of this kind." *Extract from letter of Mr. Wilson, January 12, 1909, in reply to an invitation to speak at a banquet of anti-strike and anti-boycott advocates.*

"You know what the usual standard of the employe is in our day. It is to give as little as he may for his wages. Labor is standardized by the trades-unions, and this is the standard to which it is made to conform. No one is suffered to do more than the average workman can do; in some trades and handicrafts no one is suffered to do more than the least skillful of his fellows can do within the hours allotted to a day's labor, and no one may work out of hours at all or volunteer anything beyond the minimum.

"I need not point out how economically disastrous such a regulation of labor is. It is so unprofitable to the employer that in some trades it will presently not be worth his while to attempt anything at all. He had better stop altogether than operate at an inevitable and invariable loss.

"The labor of America is rapidly becoming unprofitable under its present regulation by those who have determined to reduce it to a minimum.

"Our economic supremacy may be lost because the country grows more and more full of unprofitable servants." *Extracts from Baccalaureate Address of Mr. Wilson before the graduating class of Princeton University, 1909.*

President Warren G. Harding

"Liberty is gone in America when any man is denied by anybody the right to work and live by that work. It does not matter who denies. A free American has the right to labor without any other's leave."

President Calvin Coolidge

"There is no right to strike against the public safety by anybody, anywhere, any time."

**We Mine
One BEST
Coal
For Every Purpose,**

Alabama
STERLING ~
BLACK CREEK
CAHABA ~
RED ASH

Kentucky
NORCO
SUNBEAM
MAGIC "Ashless"
HARLAN

Not one coal for varied purposes but a selected coal of proper characteristics, prepared and sized to fit each particular need.

For 37 years we have served the discriminating trade, and point with pride to the renewal of our contracts from year to year.

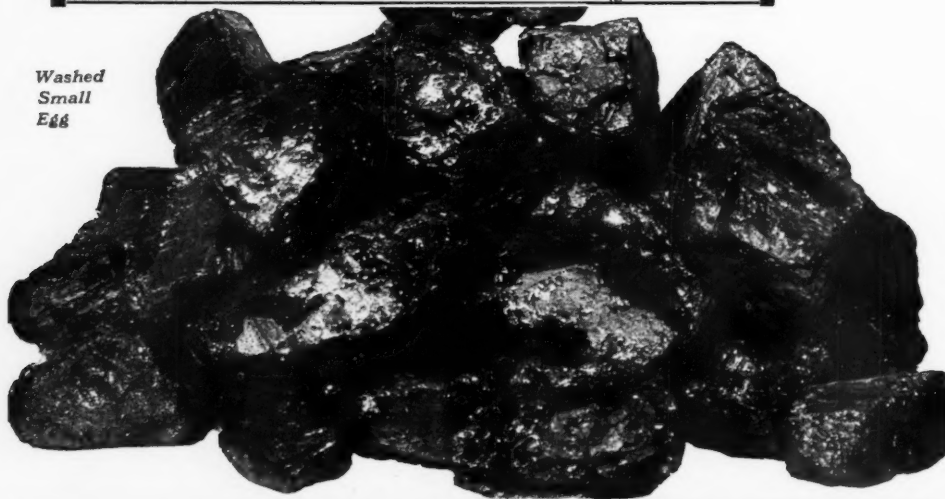
Our mines are equipped with washers, re-screening plants, loading booms, and every facility to insure perfect, standard, and uniform, preparation of our steam, domestic, by-product and metallurgical coal.

MONRO-WARRIOR COAL & COKE CO.
BIRMINGHAM, ALA.

CHICAGO, ILL.
417 So. Dearborn St.

NORTONVILLE
Kentucky

Washed
Small
Egg



The South Is A Great Storehouse of Raw Materials

In the fields of the South, almost 100% of this country's cotton grows—60% of the supply of the whole world.

The South's forests produce about 50% of the Nation's lumber, and 100% of its Turpentine and Rosin—85% of the world's output.

The Coal area of the South—twice as large as that of all Europe—has most of the coking coal of the country. The South's iron resources are in keeping with its coal reserves.

Mines and quarries in the South produce 100% of the country's Bauxite; 100% of the Fuller's Earth; about 99% of the Sulphur—more than three fourths of the world's output; 99% of the Phosphate Rock; 90% of the

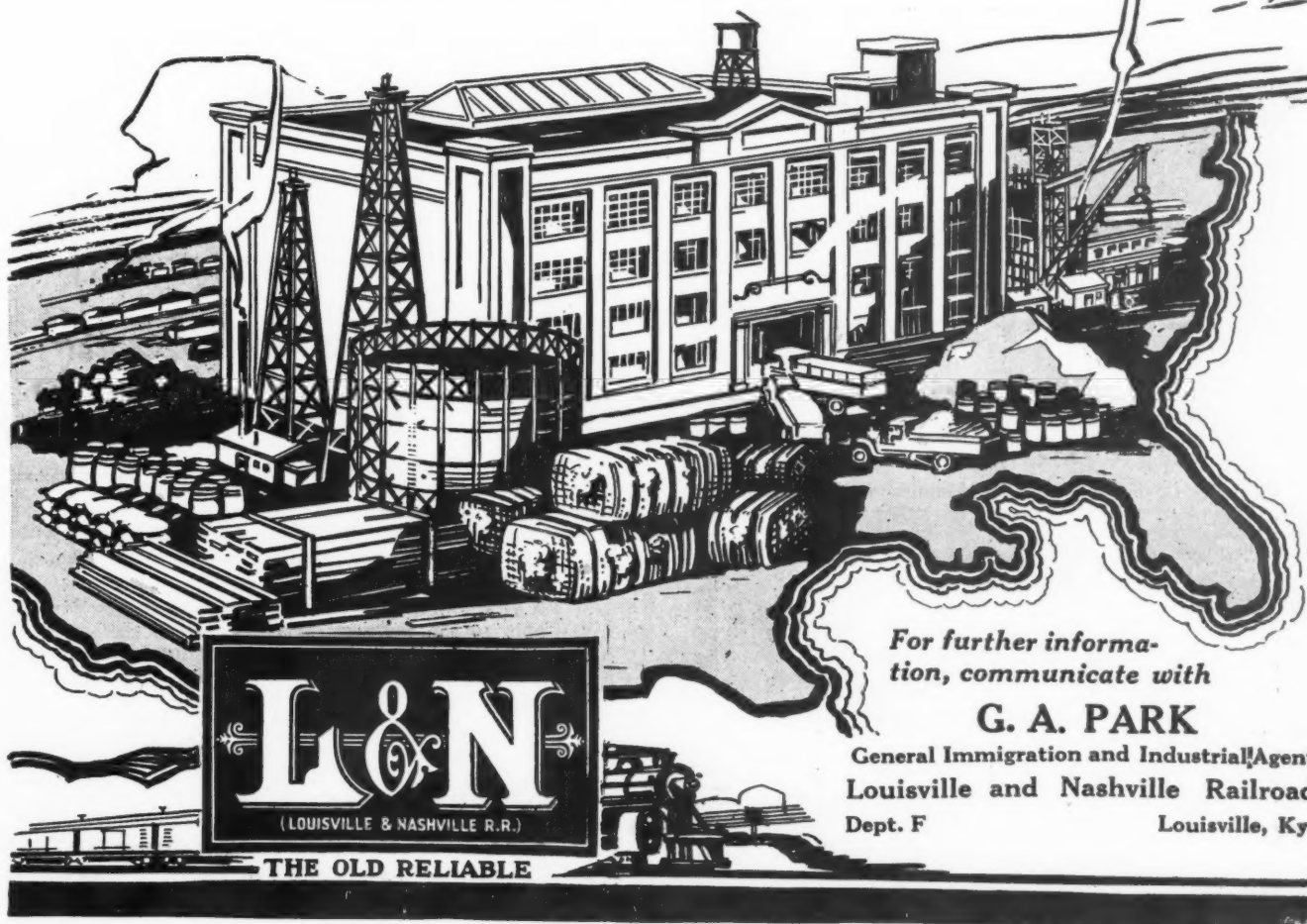
Aluminum; 60% of the Graphite; 48% of the Asbestos; 92% of the crude Barytes; and quantities of Salt, Lead, Zinc, Mica, Quartz, Feldspar, Pyrites, Talc, Soapstone, Lime, Cement, Sand, Gravel, Stone, Clay Products, etc.

The oil and gas fields of the South produce about 57% of the country's Petroleum and 75% of the country's natural gas, gasoline; 60% of its natural gas, and 89% of its Carbon Black.

The South has undeveloped water power estimated at 8,000,000 H. P.

These natural resources, together with a plentiful supply of low-cost labor and a mild climate, make the South a most inviting field for manufacture and trade.

The Louisville & Nashville Railroad has nothing to sell but its services as a common carrier; but the Company's thorough knowledge of the resources and advantageous locations for industries in the Southland is freely offered to those interested.



For further information, communicate with

G. A. PARK

General Immigration and Industrial Agent
Louisville and Nashville Railroad
Dept. F
Louisville, Ky.

YOU KNOW IT'S A "MARYLAND METAL BUILDING"

The kind that is made for every purpose; that gives life long satisfaction, and whose cost in the long run is cheaper.

Erected in a surprisingly short time and serves the same purpose of any other building. Made in interlocking units, which are shipped from our unlimited stock at any time, and of that rust resisting "Lyonore" metal, these buildings are weather-tight, fireproof and properly ventilated.

We will be glad to estimate on any requirements you might have in mind.

MARYLAND METAL BUILDING COMPANY

MANUFACTURERS

RACE & McCOMAS STS.

BALTIMORE, MD.

*Warehouse of
Large Oil Company*



THE LAYNE WATER SYSTEM

Well Water-Supply Guaranteed

Lift 10 ft. to 1000 ft.

MINE DRAINAGE—WELLS—PUMPS—SCREENS

Offices throughout the land

LAYNE & BOWLER CO., MEMPHIS, TENN.



A Southern Thoroughbred

The Coachbilt Anderson Aluminum Six is so good a car *because it is made right here in the South*, where Anderson owns its own hardwood forests, where power costs but a fraction as much as in Northern industrial centers, where labor conditions are ideal.

The touring car lists at only \$1195, f.o.b. factory. Other models proportionately.

ANDERSON MOTOR CO.

ROCK HILL, S. C.

The Coachbilt

ANDERSON

ALUMINUM SIX



SCHOOL DESKS

THE
A. H. Andrews & Co.
CHICAGO

107 So. Wabash Avenue

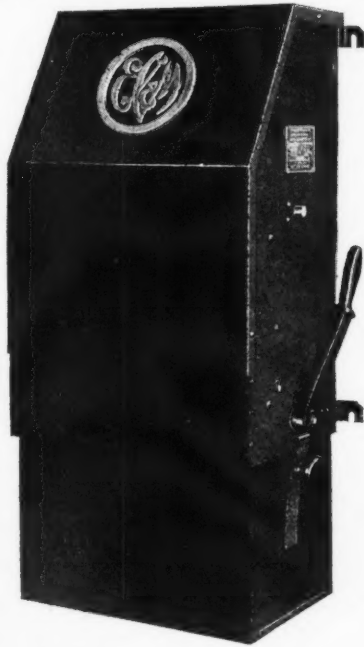
Blue Book of Southern Progress

A rich and stimulating volume it is, valuable to the investor, of daily use to the business man, and exceedingly helpful to student and educator. In thoughtfully compiled records like this is much of the meat of history; and truly may it be said of this one that it is a book, not only to be tasted, but to be "chewed, swallowed and digested."

—Atlanta Journal.

Single Copies 50c

Manufacturers Record, Baltimore, Md.



A NEW WAY OF STARTING AC MOTORS

TYPE ZK MANUAL-AUTOMATIC COMPENSATOR

It is not a Hand Compensator and it is not an Automatic Compensator, but it is a combination of the two.

The Type ZK Manual-Automatic Compensator is operated by pulling the handle toward the operator and then leaving it alone. Pulling this handle connects the motor to the transformers and the transformers to the line. After the motor has reached the proper speed to be thrown across the line, a relay causes this transition to be made automatically. This means that the motor will always be properly accelerated and not left to the judgment of the operator as to when to throw the motor from the transformers to the line, as is the case with a Hand Compensator.

To stop the motor it is only necessary to push the button shown on the side of the case above the handle.

Inverse time element overload is provided by means of an expansion wire overload panel mounted in the Compensator.

In case of voltage failure it is necessary to start the motor again by means of the Compensator; in other words, no voltage protection.

It is just as easy to operate this Compensator as it is to close a knife switch.

Send for Bulletin 1046.



THE ELECTRIC CONTROLLER & MFG. CO.

BIRMINGHAM-BROWN-MARK BLDG.

CHICAGO-CONWAY BLDG.

CINCINNATI-1ST NATIONAL BANK BLDG.

DENVER-3535 WALNUT ST.

DETROIT-DIME BANK BLDG.

CLEVELAND, OHIO

LOS ANGELES-O.E. THOMAS CO.

BOSTON-49 FEDERAL ST.

NEW YORK-50 CHURCH ST.

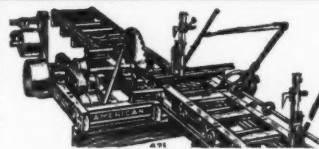
PHILADELPHIA-WITHERSPOON BLDG.

PITTSBURGH-OLIVER BLDG.

SAN FRANCISCO-CALL BUILDING

SEATTLE-524 1ST AVE. SOUTH

TORONTO-TRADERS BANK BLDG.



SAW MILL and WOODWORKING MACHINERY CONTRACTORS' WOODWORKERS and HOISTS

Catalog on request

69 Main St.
Hackettstown, N. J.

American Saw Mill Machinery Co.,

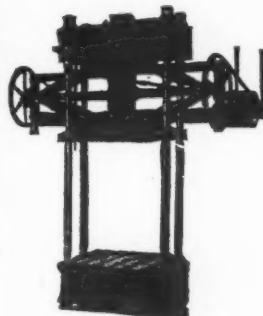
THE CARDWELL MACHINE CO.

RICHMOND, VA., U. S. A.

WE MANUFACTURE
A FULL LINE OF

OIL MILL MACHINERY

Cotton Seed, Linseed, Rape Seed, Olive, Peanut, Castor, Fish
and Lard Oil, Hydraulic Baling Presses, Tobacco Machinery



BELT DRIVE

THE STANDARD Baling Press FOR CLOTH OR YARN

Size—to suit your needs.
Power—50 to 500 tons.

ALSO

HYDRAULIC PRESSES AND PUMPS

Let us send you our Catalogue
DUNNING & BOSCHERT
PRESS COMPANY, Inc.

Established 1872

327 West Water St
SYRACUSE NEW YORK

**MOST
Economical**



SAVOGRAN

**MOST
Satisfactory**

The Standard Pure, Soluble Soap Powder
In Use for 46 Years

INDIA ALKALI WORKS, Boston, Mass.

The Bauer

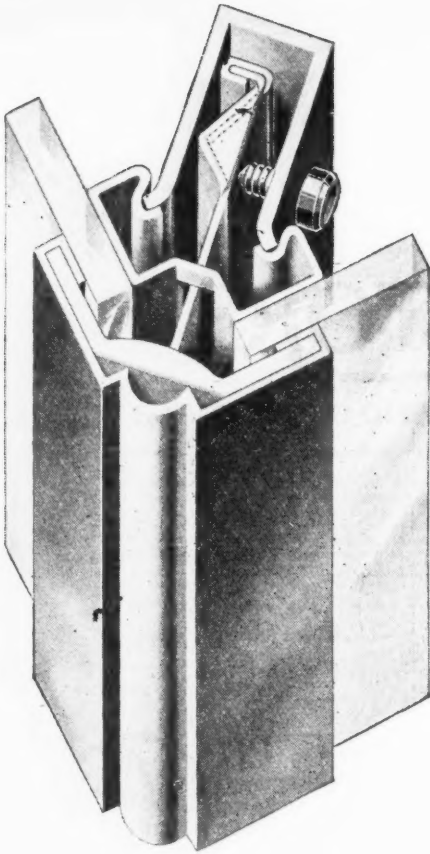
COSTS LESS PER HOUR

OIL MILL MACHINERY

Crushing, Grinding and Separating Machinery

Send For Catalogs

THE BAUER BROS. CO. 534 Bauer Bldg.
Springfield, Ohio



**This KEY is Insurance
against Plate Glass Breakage**

Zouri

**SAFETY METAL
STORE FRONTS**

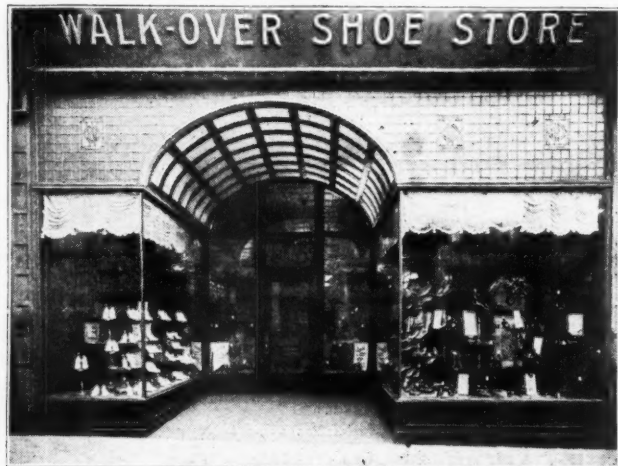


The famous Zouri Key-set type of construction positively prevents glass breakage due to faulty construction because it brings the glass into firm and even contact with the full face of the rigid rabbet. An exclusive feature of the Zouri fronts, the Murnane Self-Adjusting Setting Blocks, makes it unnecessary to pry the glass into position.

Zouri Fronts are strong, economical and attractive in design. Detailed specifications, scale drawings and the benefit of our years of experience in store front design and installation are yours to command.

Nation-Wide Service

There is a distributor near you who carries a complete stock of Zouri and International Store front construction. Ask us for his name. There is no obligation.



WALK-OVER
has the benefit
of *Continuous*
Display when
the Store Fronts
are **ZOURI**

Zouri Drawn Metals Company

General Office and Factory

1608 EAST END AVENUE

CHICAGO HEIGHTS, ILLINOIS

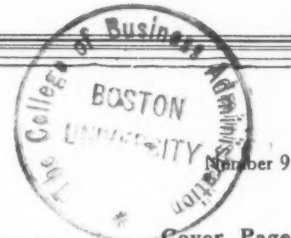
Manufacturers Record

Exponent of America

AUGUST 30, 1923

Volume LXXXIV

Table of Contents



The Right to Work by Americans as Seen by Three Presidents.....Cover Page

EDITORIALS

| | |
|--|----|
| A Feast of Good Things for the Thoughtful Man..... | 51 |
| A New York Merchant Predicts Record Prosperity for the South..... | 52 |
| Great Increase in Exports of Pork Products..... | 52 |
| Three Prominent Men Who Have Unloaded Much Misinformation Upon the Public..... | 53 |
| Wheat as a By-Product of Farming..... | 54 |
| The Pulp Wood Situation in Canada and a Reply to Some Criticisms..... | 55 |
| The West Follows the South in Organizing for Protection | 56 |
| We Need Protection Not Free Trade..... | 56 |
| How the Railroads Could Hasten Southern Upbuilding | 57 |
| A Flat Contradiction of Mr. Lewis' Claim That the Check-Off of Miners' Union Dues Is Satisfactory | 58 |
| Country Now Consumes Its Beef Production..... | 58 |
| The Cotton Shortage by Reason of the Boll Weevil Has Enormously Enhanced the Value of the South's Cotton Crop..... | 59 |
| Does He Deserve a Pension or a Prison?..... | 59 |
| An Awakening Spirit Throughout the South..... | 60 |
| Dairy Products Census, 1921..... | 60 |

THE STORY OF CINCINNATI

| | |
|--|----|
| Cincinnati as Seen Forty Years Ago and Today..... | 61 |
| Cincinnati Has the Longest Municipally Owned Railroad in the World—By Albert Phenix..... | 63 |
| Cincinnati's Greatness as Presented by a Cincinnati Banker—By Monte J. Goble..... | 71 |

NEWS ARTICLES

| | |
|---|-----|
| Paper Making from Florida Saw Grass.....By Gilbert D. Leach | 77 |
| President Stone on the Co-operative National Bank of the Brotherhood of Locomotive Engineers —By Warren S. Stone..... | 79 |
| The False Propaganda Put Out by Union Mining Interests as to West Virginia Non-Union Mines | 81 |
| Completing Plans for Convention and Road Show of American Road Builders' Association..... | 81 |
| Water Shipment of Six Tanks from Old Hickory Plant to St. Louis..... | 82 |
| Over 97 Per Cent of Carbon Black Produced in the South | 82 |
| Business Conditions Favorable in Atlanta District..... | 83 |
| Non-Union Southern Miners May Again Save the Nation | 84 |
| The Railroads Helping to Let the West Know the Georgia Yam | 123 |

DEPARTMENTS

| | | | |
|--------------------------------------|----|--|-----|
| News and Views from Our Readers..... | 85 | Mechanical | 92 |
| The Iron and Steel Situation..... | 86 | Construction | 93 |
| Railroads | 87 | Machinery, Proposals and Supplies Wanted | 108 |
| Good Roads and Streets..... | 89 | New Securities | 110 |
| Textile | 90 | Trade Literature | 111 |
| Lumber and Building Material..... | 91 | Industrial News of Interest..... | 112 |

PUBLISHED EVERY THURSDAY BY THE

MANUFACTURERS RECORD PUBLISHING CO., BALTIMORE, MD.

Branch Offices: New York, 901 Singer Building; Chicago, 11 South La Salle St.; Boston, 734 Old South Building; Cincinnati, 923 Union Trust Building.

SUBSCRIPTION RATES

\$6.50 a year (in advance); six months, \$3.50; three months, \$2.00 to United States, Mexico, Cuba, Porto Rico, Hawaii and the Philippines. For Canada, add postage \$2 a year. For other foreign countries, add postage \$5.50 a year. Back numbers, if available and not over one month old, 20 cents each. From one month to six months old, 50 cents each; over six months old, \$1 each.

In ordering change of address, give old as well as new address.

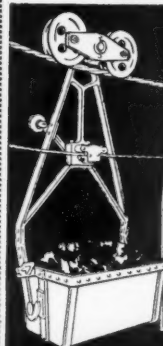
MEMBER ASSOCIATED BUSINESS PAPERS, INC., AND AUDIT BUREAU OF CIRCULATIONS.

Modern Mill Conditions Demand
Draper Filling Bobbins
With Patent Brass Brushings
An Improved Tool
For Spinners and Weavers
Let's Talk It Over

DRAPER CORPORATION

Hopedale Massachusetts

Southern Office Atlanta Georgia



Don't depend on teams,
trucks or inclines for hauling.
Use the air. Overhead haulage is
practical, economical.

Send for Catalog No. 84

BRODERICK & BASCOM ROPE CO.

New York ST. LOUIS, MO.

Seattle
P348

B & B Aerial Tramways



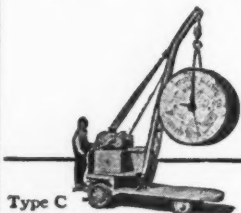
LIFT AND CARRY GOODS AND MATERIALS VIA ELECTRIC INDUSTRIAL TRUCKS

Over 200 Branches of Industry served by
ELWELL-PARKER equipments today.

Lighten Labor—Speed Production—Increase Profits

Catalog 1209

THE ELWELL-PARKER ELECTRIC CO.
Cleveland, Ohio



Type C



Type E

WIRE WIRE WIRE

Iron—ROUND—Steel

for

Ropes—Brooms—Mattresses—Staples—Pins—Clips—Hair
pins—Weaving—Lath Binding—Bundling purposes, etc.

FINISHES

Bright—Tinned—Galvanized—Liquor Finish—Coppered—Soft Annealed

Specialize in Fine Sizes and Fine Quality

THE SENECA WIRE & MFG. CO., FOSTORIA, OHIO

Southern Representatives:

J. R. Regnas & Co., Atlanta, Ga.

Jobbers Sales Corp., New Orleans, La.

E. R. Hensel Steel & Copper Co., St. Louis, Mo.

WARP TYING MACHINES
WARP DRAWING MACHINES
AUTOMATIC SPOOLERS
HIGH SPEED WARPERS
HAND KNOTTERS

BARBER-COLMAN COMPANY

BOSTON, MASS. GREENVILLE, S. C.

MAIN OFFICE AND FACTORY

ROCKFORD, ILL., U.S.A.

LESCHEN AERIAL TRAMWAYS

are economical carriers, because:

- they can often be run by gravity
- they are not affected by weather conditions
- installation and operating costs are not materially increased by irregular ground conditions
- maintenance and operating costs are low
- they are correctly designed and made of high-grade material throughout

Your inquiries are solicited

A. LESCHEN & SONS ROPE COMPANY

New York Chicago ST. LOUIS Denver San Francisco



NICHOLSON FILES

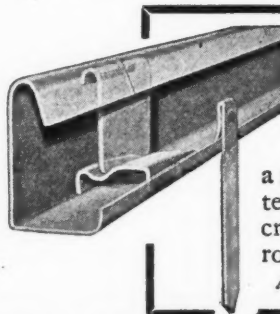
--for more and better filing per dollar, per man.

A File For Every Purpose

NICHOLSON FILE CO

PROVIDENCE, R. I., U.S.A.

WHY CONTRACTORS PREFER THE CARR FORM



QUICKLY set wedge lock joints. Ample bearing surface. Extra section length. Easy edging. Stakes set at any point. Three-sixteenths inch metal. Concrete cannot lodge on rounded top.

Ask for Form Bulletin 44-M

THE LAKEWOOD ENGINEERING COMPANY
CLEVELAND, OHIO
MANUFACTURERS OF CONSTRUCTION EQUIPMENT

Manufacturers Record

EXPONENT OF AMERICA

Devoted to the Upbuilding of the Nation Through the Development
of the South and Southwest as the Nation's Greatest Material Asset

Trade-Name Registered in the U. S. Patent Office

Vol. LXXXIV No. 9
Weekly.

BALTIMORE, AUGUST 30, 1923.

{ SINGLE COPIES, 20 CENTS.
{ \$6.50 A YEAR.

PUBLISHED EVERY THURSDAY BY THE
MANUFACTURERS RECORD PUBLISHING CO.

Office: Manufacturers Record Building, Cor. Commerce and Water Sts.
BALTIMORE, MARYLAND

RICHARD H. EDMONDS, President FRANK GOULD, First Vice-President
VICTOR H. POWER, Second Vice-President
I. S. FIELD, Secretary J. ROBERT GOULD, Treasurer

RICHARD H. EDMONDS, Editor

BRANCH OFFICES:

CHICAGO, 11 So. La Salle St. NEW YORK, 901 Singer Bldg
BOSTON, 734 Old South Bldg. CINCINNATI, 923 Union Trust Bldg

SUBSCRIPTION RATES:

\$6.50 a year (in advance); six months, \$3.50; three months, \$2 to United States, Mexico, Cuba, Porto Rico, Hawaii and the Philippines. For Canada add postage \$2 a year. For other foreign countries add postage \$5.50 a year. Back numbers, if available and not over one month old, 20 cents each. From one month to six months old, 50 cents each; over six months old, \$1 each. In ordering change of address, give old as well as new address.

In order to avoid delays all correspondence pertaining to news or advertising matters should be addressed directly to the Manufacturers Record, Baltimore, Md., and not to individual editors, officers, employees or any branch office.

It is well to study the great truths stated on our cover page when the miners' union would seek to destroy the right to work by shutting up our coal mines and starving or freezing our people into submission. Such action would be a diabolical strike against public safety.

We commend to every reader of the MANUFACTURERS RECORD the three pre-eminently strong statements of protest—two made by Mr. Woodrow Wilson prior to his becoming president of the United States and one by President Harding after he was president and the third by President Coolidge when he was governor of Massachusetts. They all state the same truth with very great force and clearness. The country needs to realize fully that every free American has a right to labor without any other man's permission and that no organization has a right to prevent a free American citizen from working. If that right is maintained by Gov. Gifford Pinchot of Pennsylvania and by President Coolidge there will be little danger of any serious shortage of coal this winter.

PIG IRON PRODUCTION FOR SIX MONTHS INCREASED 72 PER CENT OVER COR- RESPONDING PERIOD OF 1922.

THE half-yearly production of all kinds of pig iron, according to the American Iron and Steel Institute, amounted to 21,016,475 gross tons. This is an increase of 8,825,464 tons, or 72 per cent compared with the first six months of 1922, which amounted to 12,191,011 tons. The pig iron output during the last six months of 1922 was 15,028,893 tons.

The pig iron production for the first six months of 1923 was 4,328,349 tons more than the 16,688,126 tons produced during the whole of 1921.

Production of pig iron in the South during the first six months of this year was 2,405,783 tons, excluding Missouri. This is an increase of Southern pig iron over the corresponding period of 1922 of 1,043,472 tons, or over 76 per cent.

A FEAST OF GOOD THINGS FOR THE THOUGHTFUL MAN.

"Where there is no vision the people perish." Proverbs, 29:18.

He who has the vision sees more than you or I;
He who lives the golden dream lives four-fold thereby;
Time may scoff and worlds may laugh, hosts assail his thought.
But the visionary came ere the builders wrought;
Ere the tower bestrode the dome, ere the dome the arch,
He, the dreamer of the dream, saw the vision march!

From "The Man with the Vision", by the Bentztown Bard.

WHAT one man can accomplish, if he has the vision and the energy to arouse a whole city to see things as he sees them, is splendidly illustrated in the story in this week's issue, giving the history of how Cincinnati, in order to save itself from being cut off from Southern trade some years ago built and still owns the longest railroad ever constructed or owned by a municipality.

It is a story of thrilling interest. For years, Cincinnati had been the center of the pork packing industry, and its trade with the South had been an important part of its business life; but the westward movement of population and live stock interests was carrying the packing trade away from Cincinnati to Kansas City and Chicago and Omaha. And when a new railroad movement threatened to cut Cincinnati out of much of its Southern trade, facing these situations and led by a man of vision and energy, that city projected and built a railroad to Chattanooga which is now estimated to be worth \$100,000,000. It was a daring piece of municipal work; but the results achieved have proved the wisdom of its building.

The country is being told with endless reiteration that Europe is too poor to buy our foodstuffs, and that therefore our wheat growers and others must suffer because we have failed to save Europe from itself, whereas, we are exporting many times as much farm products to Europe, as we exported prior to the war. During the fiscal year ending June 30, our shipments of leading lines of foodstuffs to Europe, as shown elsewhere in this issue, amounted to 25,053,036,160 pounds as compared with 9,203,056,874 pounds, the average of our prewar period. About half of all the propaganda that goes on throughout the country for this, that, and the other, is based on statements that have no more foundation in fact than the claim that our foreign trade is withering, and our farmers are suffering because it is alleged there is no European market for their products. If our readers will study the figures given today, they will gain some light on that situation.

Shortly before his death, the Hon. Abram S. Hewitt, then often referred to as "America's first citizen," in discussing

with the editor of the **MANUFACTURERS RECORD** the labor situation, said that he looked for the coming of the time when the laborers of the country would to a very large extent own its industries. "I believe," said Mr. Hewitt, "that, from time to time, there will be a growing tendency towards the purchase of industrial securities by the working men employed by them, and I look upon this as the best solution of all of our labor problems." In the same line of thought, there is a movement under way started by the Brotherhood of Locomotive Engineers for entering the banking business, and the story is interestingly told in this issue by President Warren S. Stone of the American Brotherhood of Locomotive Engineers, giving the reasons why that organization entered into banking, with some details as to the success which has thus far attended this effort. The story is one of absorbing interest. Whether other bankers agree with President Stone's views on "service" or not, if he can make these Brotherhood banks successful on the plan of work which he has outlined, he will certainly give a merry chase to some old-time bankers who do not look upon the banking business as Mr. Stone does, from the viewpoint of service to the depositor and to the public rather than profit for the stockholders.

The movement must be watched, for the success of the Brotherhood of Locomotive Engineers in their banking operations would mean the establishment by other labor organizations of banks based upon the same principle. The plan is too big and broad and the possibilities too great for good, if well managed, and too great for evil if unwisely managed, not to be carefully studied by every business man in the country.

After seven years of experimental work and the expenditure of some hundreds of thousands of dollars, the saw grass of Florida, of which there is a vast quantity, is being utilized successfully as a raw material in the manufacture of pulp and paper. It is an interesting story of vital interest because of the romance connected with these years of struggle and likewise because the decreasing supply of timber makes absolutely necessary the finding of other sources of paper making.

Bearing on this same situation is an account in a letter published in this issue, and the editorial reply to it, showing how the pulp and paper people of this country have sought to prevent the publication of actual news as to what Canada is doing in the discussion of the proposed embargo on Canadian-made pulp. Whether we agree with the position of Canada or not, a more flagrant effort to suppress even news of what Canada is doing, or the views of Canadians on the subject, has probably never been made by any organized business interest in this country. Indeed, these interests have succeeded in bringing such pressure to bear upon other papers as to cause them to refuse to publish any articles on this line presenting the matter from the Canadian standpoint, taking the ground that all such matter is Canadian propaganda and should not be published in this country.

The **MANUFACTURERS RECORD** has not yet surrendered its independence to such an extent as to suppress news merely because that news may not be satisfactory to some business interest, nor does it suppress important news, even if the

publication of that news should increase the cost of its own white paper.

These particular things to which we are calling the attention of our readers are by no means the full measure of the menu which this week we are providing as mental food for our readers. If we have ever published as any regular issue a more interesting and important paper than the one which we are sending forth today, we cannot remember it. Those who fail to read not only the articles mentioned, but all others in this issue dealing with great economic questions, and with industrial news will by so doing deprive themselves of a wide variety of mental food, as essential to the brain as is nourishment to the body.

A NEW YORK MERCHANT PREDICTS RECORD PROSPERITY FOR THE SOUTH.

MR. JAMES H. FARLEY who with associates operates the Farley chain of stores in eighty-five cities throughout the South, is quoted by the New York Journal of Commerce as saying:

"The South is due for the greatest period of prosperity it has ever known. Wages have increased in the South in greater proportion than in the North or Middle West. Sales are better and payments for goods are better in the South than ever before. While business is good generally everywhere throughout the country, and the coming fall season promises to be the best in history, it is the South that shows the greatest and most solid gain. The building program in the South exceeds that of the North right now and homes and new business operations are progressing on a big scale.

"The smallest towns now demand 'Fifth Avenue' styles, and are as up-to-date in this regard as any of the big cities. It is no longer possible to play off 'last year's models' on the small town folks, for Fifth Avenue extends through the heart of every city and town in the country. For this we maintain a big staff of buyers in New York all the time and ship daily men's and women's clothing to all of our stores."

GREAT INCREASE IN EXPORTS OF PORK PRODUCTS.

FOR the seven months ended July, the total exports of meats shows a substantial increase over the corresponding period of 1922. Our exports of grain, excepting rye, and some other food products, however, have declined somewhat in volume though are still very much larger than the exports of similar products before the European war.

The total exports of pork products for the seven months ended July, was 1,148,266,602 pounds compared with 832,292,921 pounds exported during the seven months ended July, 1922.

The greatest increase in food products' exports during this period has been in pork and pork products. The aggregate quantity exported for the seven months' comparison follows:

| Product | 1922 | 1923 |
|--------------------------|-------------|---------------|
| | (pounds) | (pounds) |
| Pork, fresh | 9,097,543 | 26,870,508 |
| Hams and Shoulders | 176,777,069 | 216,456,187 |
| Bacon | 184,293,487 | 245,786,019 |
| Pork, pickled | 19,994,527 | 22,554,427 |
| Sausage | 1,006,916 | 1,743,214 |
| Lard | 429,673,793 | 618,786,170 |
| Neutral Lard | 11,449,586 | 16,070,077 |
| Total | 832,292,921 | 1,148,266,602 |

Three Prominent Men Who Have Unloaded Much Misinformation Upon the Public.

SOME LEADING FOODSTUFFS EXPORTS

| Product | Pre-War Average (pounds) | Fiscal Year 1923 (pounds) |
|--------------------------------------|--------------------------------|---------------------------------|
| Wheat | 3,198,950,000 | 9,297,060,200 |
| Wheat Flour | 2,046,866,000 | 2,917,011,944 |
| Corn | 2,227,468,000 | 5,267,586,968 |
| Rye | 32,043,000 | 2,879,046,800 |
| Oats | 262,262,000 | 594,355,296 |
| Oatmeal and Rolled Oats | 24,297,000 | 123,115,317 |
| Barley | 358,893,000 | 873,254,832 |
| Rice | 16,215,000 | 318,940,870 |
| Sugar | 79,368,000 | 749,855,325 |
| Lard | 482,159,000 | 952,641,705 |
| Bacon | 188,750,000 | 408,282,000 |
| Hams and Shoulders | 173,859,000 | 318,186,689 |
| Butter | 3,110,777 | 9,409,837 |
| Cheese | 2,654,315 | 8,446,321 |
| Milk, condensed and evaporated | 16,473,782 | 137,000,000 |
| Potatoes, white | 90,688,000 | 178,842,060 |
| Total Food Exports | 9,203,056,874 | 25,053,036,160 |
| Leaf Tobacco | 377,019,874 | 445,186,472 |

In the light of these figures is it not about time to stop talking about our having no foreign market for our farm products?

A FEW weeks ago Senator Copeland of New York in a commencement address in North Carolina said: "In normal times we export from this country 170,000,000 bushels of wheat. Conditions in Europe are such that they have no money to pay for our product. Their poverty and depreciated currency make it impossible for them to buy. The result is that in granaries in the Northwest and in vacant lots along the railroads in piles are quantities of grain for which there is no demand."

A dispatch from Seattle tells of an address delivered by Secretary McAdoo, whose pre-eminent failure as a railroad administrator during the war loaded the railroads with an enormous indebtedness, and enormous unnecessary increased expenditures which forced upon the country the high freight rates we now endure by reason of his activities, said: "Farmers are shot to pieces by the low prices for all they have to sell and by high prices for all they have to buy. * * * The farmers need more and better markets where they can sell their products at a profit instead of at a loss. And "foreign markets," he added, "must be provided by a national foreign policy and a sensible tariff policy."

President Willard, of the Baltimore and Ohio Railroad, on returning from Europe last week, gave the Baltimore Sun a three column interview in which he said: "We produce approximately 200,000,000 bushels of wheat more than we can consume and Europe cannot buy, so we have that 200,000,000 bushels of wheat doing no one any good." In the same statement, Mr. Willard said: "We must have foreign markets, or we must suffer intensely."

Here are three men of prominence in the political and business world, misleading the country and, like blind leaders, they would lead it into the ditch if it should follow their teachings. It is a pity that men in their position make such groundless statements and that millions of people think that they are true. Senator Copeland's statement that we have 170,000,000 bushels of wheat more than we can find a market for; President Willard's statement that we have 200,000,000 bushels above our needs and that there is no one ready to buy it and Mr. McAdoo's statements are about on a par.

The facts are that during 1920 we exported wheat and flour 307,630,000 bushels. During 1921 we exported 355,658,000 bushels and during 1922, 231,804,000 bushels. The average for these three years is largely more than double the average of our exports of wheat prior to the war. Certainly these figures do not indicate that Europe is not able to buy wheat and to buy it to a much larger extent than ever before in the history of our country.

In 1912 our exports of wheat and flour amounted to 109,450,000 bushels and in 1913, to 154,760,000 bushels. Even the exports for 1913 are just a little more than half of the average

exports for the three years, 1920, 1921 and 1922. Notwithstanding that the first seven months of the calendar year is the lightest period for the exportation of wheat, we shipped out during the first seven months of this year 85,700,000 bushels of wheat and flour and as the new crop is coming to the market it is going forward to Europe on a rapidly increasing scale. Senator Copeland gives us 170,000,000 bushels for which we can find no market and President Willard puts it at 200,000,000 bushels a year, but we have exported every year since the war far more than the figures quoted by either of them as our surplus and we are exporting at the present time at a rate which will probably carry the figures for the twelve months considerably ahead even of President Willard's 200,000,000 bushels. There is thus absolutely no foundation in fact whatever for the statements as to wheat made by Senator Copeland and President Willard.

A little study of official records of the government would have saved them from making such blunders and it is such blunders as these that are constantly misleading the public. Indeed, blundering statements of this kind are largely responsible for the pessimistic talk about wheat. Our wheat market has been broken down in price largely because of this kind of talk. It is true that the world has raised an unusually large wheat crop. The estimates in Canada alone for this year's crop run from 400,000,000 to 500,000,000 bushels; which is far in excess of any yield of the past. France has had such splendid crops that its experts report that no importation of wheat will probably be needed, except a moderate amount from some of its African possessions. A number of other European countries have also had fine yields. And to the extent that Europe can supply itself with wheat it will not, of course, import, but that is not an evidence of poverty. It is, on the other hand, an evidence of increased prosperity in agricultural interests which are producing at home much of the foodstuffs needed for feeding Europe. Surely we cannot complain if the farmers of Europe have returned to work with such energy and have been blessed with such crops that Europe will need to buy less of some kinds of foodstuffs than in former years.

On the other hand, we must remember that the vast wheat region of Canada is being opened up, as our prairie region was fifty or sixty years ago, bringing about an enormous expansion in wheat production just as we had in those early days. When the prairies of the West began to produce wheat in great quantities the wheat growers in New York and other Eastern states found they could not compete successfully with the wheat raised on the prairie lands of the West. Our wheat growing lands are today worth anywhere from five to ten times the price of the wheat lands in Canada and to that extent the Canadian farmer has an advantage over the American farmer, for the Canadian farmer is raising wheat on virgin land, opening up with modern machinery great prairie regions.

The statement made by President Willard: "We must have foreign markets, or we must suffer intensely," voices just about what Senator Copeland and Mr. McAdoo said on the same subject and on this point all of them are just as far from facts as were the statements in regard to wheat. We have foreign markets to a greater extent than ever before in our history, with the exception of the war years, during which we flooded Europe with munitions of war and foodstuffs at very high prices. But even now our world wide trade especially with the Orient and South America is growing at a remarkable rate, both in imports and exports, and with Europe we are doing more business than prior to the war.

Before the World War, our foreign exports were running

in value at the rate of \$1,829,000,000 in 1910; \$2,300,000,000 in 1912 and \$2,448,000,000 in 1913. We had not surpassed these figures. They were the largest of our foreign exports up to that date. But in 1922 we exported \$3,771,000,000 and in 1923 our foreign exports were valued at \$3,957,000,000, or more than twice the total for 1910 and about twice the total for 1914.

We have heard much about Germany's alleged poverty, but during the last fiscal year ended with June, Germany bought from us \$293,000,000 worth of merchandise, while France took \$269,000,000. The United Kingdom bought \$823,000,000 and almost every country on the face of the earth bought freely from us. At the same time we greatly expanded our import trade. We are literally being flooded with the products of Europe and of Asia. We bought, for instance, from Europe last fiscal year to the extent of \$1,161,000,000, or a gain of \$330,000,000 over the preceding twelve months. We bought from the Orient during the same year \$1,068,000,000 worth of stuff, or a gain of \$323,000,000 over the preceding year and far and away beyond any trade with the Orient we had ever had in former years. From Japan alone we bought \$372,000,000 worth of stuff. Our trade with South America has been increasing on the same scale.

And yet, Mr. McAdoo, Senator Copeland and President Willard tried to convince the public that we have no foreign markets and that our wheat lies stagnant, even as Senator Copeland informed us "piled up in heaps on the ground." Possibly Senator Copeland, and we give him the credit for this thought, may have meant the stacks of wheat that had not been threshed out.

All three of the statements to which we have referred are attempted arguments for one thing or another which these speakers desire to press upon public attention. They all were based on the thought that we must enter the League of Nations, or in some way must tie ourselves to European affairs, or else, as in the suggestion of Mr. McAdoo, we must reduce our tariff and throw our markets still more widely open to be flooded with the products of Europe and Asia, produced at starvation rates of wages. When men of affairs can find no better arguments than those advanced by these three gentlemen for advocacy of their views surely they hold a very weak position. In basing their arguments on false premises they merely reach false conclusions.

Senator Copeland also advanced an argument which the graduating students must surely have said was leading to reductio ad absurdum. He suggestion that it was very easy to solve the problem of our surplus wheat if everyone in the country would eat an extra slice of bread at each meal and having thus used up his alleged surplus of 170,000,000 bushels, this would require 1,500,000 bushels of corn for producing the yeast necessary to make the bread, and this would increase the demand for corn, and to bake the surplus wheat into bread would require an ocean of milk and on and on ad infinitum.

Some years ago an alleged statistician seriously figured out that if the 400,000,000 people in China could only be induced to wear one more shirt a week than they were wearing, or if they could be persuaded to increase cotton consumption by adding one inch to the length of their shirt tails the demand for Southern cotton would be so enormously increased that the South would roll in wealth as the result of furnishing this increased supply of cotton for the extra shirts or shirt tails of the Chinese people. Suppose for instance we could by active propaganda work persuade the Chinese to wear an extra shirt a week, or to lengthen their shirt tails by one inch and that this would result in the increase in the demand for Southern cotton as estimated, we could then figure out, as Senator Copeland has done as to his three extra slices of bread a day, and show that this would mean so many millions of bales of cotton, and every bale of cotton would require more steel ties and this would rush the cotton

tie making mills, and that would mean the consumption of more coal and more iron ore and more railroad transportation and more compresses for handling this increased supply of cotton, and all of this would mean an increased demand for wheat and corn for food stuffs and feed stuffs generally for the Southern planters and so we could build on that theory a more appealing picture than the one provided by Senator Copeland.

Strange that a United States senator should carry the theory of this increased consumption of three pieces of bread a day to the extreme of suggesting how much extra "sugar and jams and cheese and sauce and fruits for the pies" and other things would be required. If the students of the North Carolina college did not "give him the merry ha-ha," it must have been due to their extreme courtesy and politeness.

And yet Senator Copeland's statements are in keeping with those made by President Willard of the B. & O. and by Mr. McAdoo, the breaker down of American railroads.

WHEAT AS A BY-PRODUCT OF FARMING.

WE do not in the slightest degree minimize the plight of some wheat growers who have been frightened by the pessimistic talk which has helped to break down the price of wheat. But there is one phase of wheat farming which must always be taken into consideration. Few, if any, newspapers in the United States receive for their subscriptions anything like the actual cost of printing the paper, but the loss on circulation must be accepted as inevitable under present conditions of newspaper work and the profit must come from the advertising which is created by circulation.

The farmer does not raise wheat purely on the basis of cost of wheat without taking into account other factors connected with wheat growing. Wheat is a part of the rotation of his crops and the improvement of his land and the raising of live stock. In some sections of the West wheat has unwisely been made as important as a one-crop system as cotton has been in some parts of the South. In that case the wheat growers' loss is a total loss, but to a large extent wheat is raised as one part of a rotation of crops. The land needs the change from one crop to another. The production of wheat followed by that of corn and of grass helps to maintain the live stock interests and, all combine to maintain the fertility of the soil and on well regulated farms to increase its fertility. Wheat could no more be dropped out in a well rounded farm operation of this kind than the circulation of a newspaper could be done away with on the ground that circulation was a loss and that the advertising must be had without circulation.

Many industries lose on one part of their operations, if considered entirely by themselves, but that losing part is, as in the newspaper business, an essential factor in the general success of the scheme. Farming must be regarded on the same basis. The farmer may lose on one thing, but he may make it up in increasing the fertility of his soil or in carrying on some other farming operations for the production of other crops.

There has been entirely too much pessimistic talk about wheat. One might almost be inclined to believe that some of this propaganda has been put out by the speculative interests, desiring to prove that recent laws against speculation have been responsible for the decline in price. So persistent and widespread has been this pessimistic propaganda talk about wheat and our inability to market it and the unprofitable price which the farmers are receiving, that anyone who has followed the propaganda work of foreign governments and of many business interests and political movements during the last ten years is compelled to feel that back of all of this pessimistic talk has been some influence which put it into movement, and which helps to spread the doctrines of pessimism and a lack of foreign markets.

THE PULP WOOD SITUATION IN CANADA AND A REPLY TO SOME CRITICISMS.

New York, August 21.

Editor Manufacturers Record:

A few days ago, I received your letter of August 16, as to article in the MANUFACTURERS RECORD entitled "The Pulpwood Situation in Canada."

In view of the fact that the MANUFACTURERS RECORD is an "Exponent of America," we are just a little surprised that such an article as that by Peter Vischer on the pulpwood situation in America should be published without giving some American organization interested a chance to answer it. Mr. Vischer's article is manifestly propaganda in favor of an embargo upon pulpwood from Canadian free-hold lands. You will see, from the attached copy of telegram, that he offered similar article to the paper trade journals and, I believe, these journals turned him down.

This question of a threatened embargo upon pulpwood from Canadian free-hold lands is, in a way, in the same category as American owned oil lands in Mexico. During the past few years a good many American manufacturers of pulp and paper have gone into Canada and, in good faith, bought timber lands or timber limits with the understanding that it would be possible to take from these lands pulpwood for use in pulp mills in this country. Extensive improvements have been made for the purpose of getting the pulpwood to American mills. Since the war, there has been evident in Canada a marked nationalistic development, and there is quite a party insisting that Canada's raw materials must be manufactured in Canada. Doubtless that is all right as far as Canada is concerned, and yet they must give consideration to the millions of dollars of American money which has been invested in good faith and with the understanding, always, that it would be possible to bring wood from Canadian forests into this country.

That this matter has an international significance is indicated by the fact that Secretary Hughes has communicated with the Canadian Premier, and the Premier has assured Secretary Hughes that no action will be taken until after a Royal Commission, which has now been appointed, makes thorough investigation. The paper industry in this country does not propose to stand by and take the injury which would come from such an embargo on Canadian wood.

If the Canadians succeed in putting on an embargo, it means that many of our large paper mills, if they wish to continue, will be forced to build pulp mills in Canada. That, of course, is exactly what the Canadians want. I doubt if many of our mills would go to the expense of building mills in Canada, because it would play into the hands of the Canadians in the way of securing complete control of the paper industry on this continent. The embargo would probably mean an immediate advance in the prices of all grades of paper; particularly, the paper used by the daily and trade press of this country.

Again let me express surprise at action of a publication of your standing in publication of an article that is, beyond doubt, very definite propaganda on the part of the party in Canada wishing to control the paper industry of the continent.

HUGH P. BAKER, Secretary.

The foregoing letter from Mr. Hugh P. Baker takes a rather narrow and provincial view of what newspapers should or should not publish. The MANUFACTURERS RECORD has informed Mr. Baker, and it repeats here, that under no condition whatsoever does it ask of any interest whatsoever whether it would be agreeable to them to have us publish an article which has been offered to us as a piece of news. Mr. Vischer's statements in regard to conditions in Canada should interest every American paper and pulp man in letting them see the exact conditions prevailing in Canada and they should not attempt, by abuse of the writer of that article, or of criticism of the MANUFACTURERS RECORD, to ask American people to hide their heads in the sand and with the stupidity of an ostrich not know what is going on.

We take it for granted that Canada has a perfect right to pass any law for the protection of its own interests. Indeed, Mr. Baker states that since the war there has been "evident in Canada a marked nationalistic development" and there is quite a party insisting that Canadian raw materials must

be manufactured in Canada." We commend Canada for taking that position. It is exactly the position which for forty years the MANUFACTURERS RECORD has been taking in behalf of the development of this country. We have insisted that the exportation of raw materials from any part of this country deprives the section shipping these raw materials of the opportunity for creating home industries for the full utilization of these materials.

No country on earth can get rich shipping raw materials. Raw materials are simply the basis for the employment of labor and labor creates the wealth which comes out of the use of raw materials. Wherever raw materials can be utilized at home, whether that be the United States or Canada, whether, so far as this country is concerned, it be the utilization in Alabama for instance of coal and ore, carrying the raw materials through to the finished product; whether it be in Louisiana in the utilization of gas or oils and sulphur, the MANUFACTURERS RECORD is heartily in sympathy with the policy of using these raw materials at home to as great an extent as possible. It does not believe that we can by legislation prevent the shipment of raw materials from one state to another. That would be unwise under our form of government. Canada has a perfect right to utilize its raw materials at home if it decides to do so. We have a perfect right to utilize our raw materials of all kinds at home for the production of manufactured goods, preferring to ship the finished product into Canada or other countries rather than send the raw materials abroad. It would be better, for instance, for this country if we could turn all of our wheat into flour and ship the flour rather than the wheat, but that point has not yet been reached.

It is quite true that there is an international significance to what Canada is planning to do and we are not at all surprised that Secretary Hughes has communicated with the Canadian Premier on the subject. But that does not by any means whatever prove that we are wholly right and Canada is wholly wrong. Even if Canada should be wholly wrong the assumption that the MANUFACTURERS RECORD must not publish news of this kind is a piece of presumption and an evidence of very poor judgment. Mr. Baker suggests that an embargo would probably mean an immediate advance in the price of paper and especially in paper used by the daily and trade papers of this country. That has no bearing with us whatever on the publication of news. The news as to what Canadian people are thinking of doing and what they may eventually accomplish, is news, pure and simple, and even if we knew that the success of Canada in its plans would greatly increase the price of paper to the MANUFACTURERS RECORD, that in itself would not in the slightest have affected the decision of this paper to publish Mr. Vischer's article.

We take the liberty of suggesting to Mr. Baker that he broaden his views a little and that he come to a realization of the fact that the MANUFACTURERS RECORD is not controlled, in the publication of news or views, by any interest of any kind, not even by its own cost of publication. The fact that organs of the paper trade declined Mr. Vischer's article in no way whatever affects the judgment of this paper.

Moreover we take the liberty of suggesting that Mr. Baker's comparison of the pulp wood from Canadian free-hold lands as in the same category as the American-owned oil lands in Mexico is unfortunate. The comparison is unwise from his own point of view for we doubt not that much of the trouble we have had with Mexico of recent years is due to unwise acts on the part of some American oil interests. We do not believe that Mexico should be drained of this vast raw material, except on a basis which would give to Mexico and to Mexican people some fair share in the profits which have come from the industry. The exploitation of the various countries in the world for the benefit of great interests has not always been wise.

THE WEST FOLLOWS THE SOUTH IN ORGANIZING FOR PROTECTION.

THE Western Tariff Congress, which will meet in Denver in October, is a recent organization, as mentioned in our dispatches in last week's issue of the *MANUFACTURERS RECORD*. It has been called by Western people as a means of maintaining the rates in the present tariff law on Western products. The call is signed "jointly by Frank J. Hagenbarth of Salt Lake City, Chairman of the Organization Committee, and John H. Kirby, of Houston, President of the Southern Tariff Association. Joining in the call are Hon. Wm. E. Sweet, Governor of Colorado, Hon. Chas. C. Moore, Governor of Idaho, Hon. Wm. R. Ross, Governor of Wyoming, Hon. G. W. P. Hunt, Governor of Arizona, Hon. Chas. E. Mabey, Governor of Utah, Hon. Jas. F. Hinkle, Governor of New Mexico, Hon. Jas. G. Sorughan, Governor of Nevada and Hon. Joseph M. Dixon, Governor of Montana; also the producing organizations of the West, chambers of commerce, bankers' associations and other organizations representing practically every line of productivity known to the West."

The outstanding features of the Congress, according to statements of the officials, will be the opportunity given Western producers to pass judgment upon the operation of the present tariff act, as applied to Western products; to discuss the efficacy of the flexible provision of the tariff act as a fundamental principle of government and a supreme effort to take the tariff out of partisan politics. In these important functions those who have called the Congress invite the co-operation and judgment of those most concerned and most capable of directing Western progress.

The organization of this Western Tariff Congress, following the work of the Southern Tariff Association, is a move of very great importance, as it will bring directly to the front the active work of Western people of all classes, farmers, manufacturers and business men generally, who believe in a protective tariff as essential to the prosperity of this country. The Southern Tariff Association under its able leadership has presented to the people of the South a protective tariff as an economic measure which should not be discussed from partisan standpoints.

A protective tariff is the only means by which we can save the farming interests as well as the manufacturing and general business interests from being swamped by the products of Oriental and European low wage labor. The Orient is already crowding upon us more than \$1,000,000,000 worth of stuff a year. These products are produced at rates of wages that simply stagger the imagination as to how people earning from three to five, seven and in some cases, ten cents a day can possibly exist and yet with that teeming population of over one billion people in the Orient, living on such wages as these, they are turning out a vast amount of stuff and rushing it to our country. They are shipping agricultural products which come in direct competition with many of the agricultural products of this country, especially of cotton seed, peanuts, soya beans and other oil producing crops. Against the low wages of the Orient and the silver basis of those countries and the low wages of Continental Europe, no part of this country can compete, except through a protective tariff.

If it had not been for the protection which the present tariff gives to some agricultural products the West would have been inundated with wheat from Canada, raised on land costing from one-fifth to one-tenth of the price of the wheat lands of this country. When complaining of low prices of wheat the Western farmers may well be profoundly thankful

that they do not have to face Canadian competition on a free trade basis, for if that were true the present price of Western wheat would then seem rather high and profitable by comparison.

In direct line with the preceding statements is the announcement made by Julius H. Barnes, President of the United States Chamber of Commerce, issued since the foregoing was written, in which he points out the value of a protective tariff to the wheat growers of this country and shows how a tariff on wheat is saving these farmers from being crushed by the rush of Canadian wheat which would flood the United States. Mr. Barnes said:

"But, it plainly does not square with the present fact to state that protective duty on wheat is of no benefit to the American farmer, because in the American northwest where crop yields have been most favorably affected this year and, therefore, the need of adequate price is most insistent, the effect of this protection against similar qualities of wheat produced just across the intangible line of the Canadian border is clearly marked. For instance, the new crop of northwest spring wheat of strong milling qualities has advanced in price recently in the Minneapolis market until today it could be sold for fall delivery at \$1.15 per bushel. The same quality wheat of equal milling value for fall delivery in the Winnipeg market will not bring over 95 cents at the time this comparison is written. Moreover, the Canadian farmer is paid in Canadian dollars, which are two per cent below American dollars in their buying value today."

A call for the bankers of the nation to participate in the Western Tariff Congress which is to be held in Denver, Colorado, early in October, has been issued by the American Bankers League, through its president, Chas. deB. Claiborne, Vice President of the Whitney Central National Bank of New Orleans. Presidents of all state bank associations are requested to circularize the banks in their respective states calling attention to the importance of the Western Tariff Congress and asking state bank presidents to appoint twenty five delegates or more to represent the organization at the Congress.

In his communication President Claiborne points out that the banks are the first victims of uncertainty in values and should be the first to protest against a policy of instability in tariff rates on the part of government and adds that no industry affected by a tariff can thrive or exist on a basis of a daily permit from the Tariff Commission on rates of duty, as they will be compelled to do if the present policy of agitation and uncertainty on the part of the Tariff Commission is to be pursued.

WE NEED PROTECTION NOT FREE TRADE.

IN discussing the business situation, the Iron Age seems to have taken a "free trade" point of view. It says "we must let down the barriers on the return road from Europe to us" and adds, "The cure for existing industrial evils is the removing of economical restrictions, not the erection of more of them."

The Iron Age is wrong. The removing of economical restrictions otherwise known as the protective tariff would be disastrous to us instead of being helpful. We are already doing a greater import and export trade than ever in our history except during the war period. The economical restrictions of the present protective tariff are not keeping us from being flooded with the products of Europe and the Orient. Why do we want to break down our industries at home for the benefit of industries abroad? The Iron Age is on the wrong track. We need protection and not free trade.

The members of the Chamber of Commerce of Houston, Texas, have voted on the question of the Open Shop or American Plan of employment. The vote was 476 for the Open Shop and 32 against it. Of this, 441 voted in favor of the Chamber of Commerce endorsing the principles of the Open Shop and lending its active aid in support thereof.

HOW THE RAILROADS COULD HASTEN SOUTHERN UPBUILDING.

WB. POWELL, secretary of the Lake County Chamber of Commerce of Tavares, Florida, for so many years that the memory of man (at least of this one) runneth not to the contrary, one of the most alert and active men in Florida in making known the advantages of that state, writing under date of August 18 to the MANUFACTURERS RECORD, said:

"You asked the commercial clubs of Florida to advise you what they were spending to exploit their communities.

"In Lake County we have eleven active organizations. Four have paid secretaries on full time—others have live business men to do the work as a matter of loyalty. The Lake County Chamber of Commerce has a fund of \$18,000 a year and Eustis, Leesburg and Mt. Dora, with paid secretaries about \$25,000. Groveland, Umatilla, Tavares, Fruitland Park, Montverde, Clermont, Minneola, Howey, Mascotte, Lake Jem, Okahumpka, Yalaha, Lady Lake, and even lesser communities have civic bodies which function—Groveland, Umatilla, Tavares and Clermont issuing literature and having stated meetings. Besides this there are four luncheon clubs very active, besides Kiwanis and Rotary Clubs. All told these bodies expend \$80,000 a year for publicity. Then we have a large number of colonization companies—one spending \$18,000 a year for publicity. I dare say that \$100,000 would not cover the actual money expended for advertising, printed matter, postage and clerical work in attending to mailing literature and writing letters.

"I have had 18 years experience in publicity work in the state and in all that time there is a drag which we can not overcome until the railroads do their part. The people openly state that 'why should we spend our money to make business for the railroads, when the railroads do not spend any money to help us?'

"And yet, they do spend money—half-heartedly—simply because if they do not do their duty to the community that community will suffer as much as the railroads.

"That railroad advertising and alluring rates is building up the Pacific Coast more than any other factor is undeniable. It would do the same thing for Florida. This I am sure.

"Eighteen years ago I came to Florida from St. Louis—paid \$20 for a round trip ticket from St. Louis to Miami. Others from the little Illinois community were attracted to Florida at the same time. Of that party I can count more than a score of citizens of Florida.

"If it is true that this advertising and the low rate brought twenty folks from a town of 1000 people it must be true that others came in like proportion from several other communities.

"Long after I came to Florida the railroads offered low excursion rates to Florida and return. These excursions ran twice a month and later once a month, if I remember correctly. But I do know that on the dates of the excursions, scores came to St. Petersburg, where I was then located.

"Florida would grow more the next ten years than it has grown the past thirty if the railroads would co-operate more fully with the communities struggling for growth—communities could raise \$1000 for publicity where they can not raise \$100—for you can not pass up lightly the fact that there is not a friendly feeling between the people of Florida and its railroads, taking it by far and large.

"The real estate man will remark when solicited for publicity fund: 'Yes, it may be all right. The railroads will get theirs regardless, but I may burn up gasoline and waste time on a dozen prospects and not make a commission.' The groceryman and the butcher and the proverbial candlestick-maker will remark: 'I am tired making business for the railroads which soak me more and more for freight.' The hotel man will say: 'The railroads are the ones to profit—they get \$100 out of the passenger—I get probably a lodger for one night.' And so on, ad lib. Invariably that unfriendly feeling toward the railroads presents itself. In open meeting the railroads are roundly denounced for their apathy towards Florida's call for co-operation in publicity.

"I have been at meetings when on a large board was pasted forty square feet of railroad advertising calling attention to the Pacific Coast as a summer or winter resort—and on an opposite board fully as large was a blank space 'This shows what our railroads think of us.'

"You have the right idea. The plea must go higher up than the passenger departments. I know the men who man this important branch of the railroads, and I know their love

for Florida and if, as you cited, the Wall Street powers would say: 'Here's a million—go spread it four ways in advertising the South and its attractions', these railroad men would do it with such acclaim that over night the South would awaken and respond to the urge of a new and greater South."

There are many interesting facts in Mr. Powell's letter. Some of them relate to the extreme activity of the commercial organizations of the various communities in Lake County in their publicity work. These bodies expend as much as \$80,000 a year for publicity while colonization companies in the same community are also making heavy expenditures, the estimate being that these colonization enterprises alone are spending as much as \$100,000 a year for publicity which would make \$180,000 expended in this way in that one county. No wonder Lake County is making such remarkable progress as to attract the attention of every one who has the opportunity of motoring through that superbly beautiful region.

There are other things stated by Mr. Powell which are of even greater interest and they relate to the mistake which the railroads are making in not taking their part in publicity work and the influence which this is having in causing others to hesitate in spending money for advertising. Discussing this situation, Mr. Powell referring to public meetings where the subject is discussed, says: "Invariably that unfriendly feeling toward the railroads presents itself. In open meetings, the railroads are roundly denounced for their apathy towards Florida's call for co-operation in publicity."

Here is a straight, clear, truthful statement that hits right out from the shoulder. It states the facts, and the facts which every railroad security owner ought to fully understand for this spirit, brought on by the railroads themselves, is responsible for a large part of the hostility to railroads.

The editorial calling forth the letter from Mr. Powell also brought one from Mr. J. Hampton Baumgartner, for many years connected with the Baltimore and Ohio Railroad. In the course of his letter, he said:

"The editorial reply in the MANUFACTURERS RECORD of August 16 to the inquiry of a railway executive concerning the dissemination of information about the South in the North and West is both constructive and pointed.

"It seems to me, however, that your advice fell short in one important particular when you failed to urge the railroads to begin their advertising at home as their first contribution to building a greater South. Possibly your failure in this respect was due to modesty.

"The railway executive whose inquiry was prompted by a desire to promote the prosperity of the South—possibly of his own company at the same time—should have been told that the first thing to be done by the carriers of his section is to 'sell' their complete service to the business men in particular and to the general public of the South. The railroads of the South would be able to increase their earnings by advertising their transportation service in a manner that would encourage patronage from shippers as well as from travelers. Most railroad advertising, in the South and elsewhere, falls short in accomplishment because of adhering to the mistaken policy of advertising passenger service practically exclusively. While passenger business is a profitable source of railroad revenue, I question whether the railroads of the South or of the country have gotten as big a return upon the money spent for advertising as would have been the case if they had kept the shippers prominently in mind when preparing their printed-and-paid-for sales messages.

"In undertaking a campaign in the interest of Southern prosperity the railroads should adopt a program of advertising, directed at the business interests and for publication in the business and newspaper press of the South. The MANUFACTURERS RECORD, the 'Business Bible' of the South, should be made the key publication in such a campaign, in order to intensively develop more railroad traffic within the bounds of the South. This would soon reach beyond territorial limitations in the natural order of things, for much of the traffic coming from and going into the South is offered to the railroads.

"By informing the Southern business men concerning its plans for industrial development through the MANUFACTURERS RECORD, the Seaboard Air Line is making an effective bid for friendship as well as traffic; and much railroad traffic is

routed in accordance with the wishes of consignor or consignee. Railroad traffic officials, like other salesmen, cannot know all of the sources of business. Advertising develops unexpected sources of tonnage as well as unexpected purchasers of tickets.

"Naturally, the railroads would be promoting the prosperity of their section, with profit to themselves, by advertising the business and social opportunities of the South to other sections; but the first step in this direction is to begin at home and "sell" the South on its railroads and on itself."

In advocating railroad publicity the MANUFACTURERS RECORD means such broad publicity as to reach every intelligent newspaper and magazine reader in America.

A FLAT CONTRADICTION OF MR. LEWIS' CLAIM THAT THE CHECK-OFF OF MINERS' UNION DUES IS SATISFACTORY.

AT the conference recently held in Atlantic City between representatives of the United Mine Workers of America and the anthracite producing companies, John L. Lewis, president of the United Mine Workers, urging the adoption of the check-off at mines in the anthracite fields, said that in the bituminous fields it works satisfactorily to both the miners and the operators of the mines. In answer to this assertion the Bituminous Operators' Special Committee said:

"No statement could be further from the truth. On the contrary, the check-off has proved so inimical to the steady and peaceful production of bituminous coal that the Bituminous Operators' Special Committee has filed a formal request with the United States Coal Commission for the complete abolition of the system. * * *

"So far as unionism is concerned, the check-off exists in practically no other union in American industry. It is a unique weapon of enforced taxation, insisted on by the United Mine Workers alone. The great self-respecting unions of the country are able to command sufficient confidence among their members to collect their own dues without this artificial aid. Even among the miners of Great Britain, who have been unionized for generations, the check-off does not exist and would not be tolerated for a moment."

John C. Brydon, chairman of the Committee, also said:

"In Mr. Lewis' statement he does not and cannot deny that the forcible collection of union dues and assessments by the check-off is a system not used by any of the great unions of this or any other country. He does not deny that it puts into the treasury of the United Mine Workers this enormous sum, (upwards of \$17,000,000 annually). He makes no attempt to justify the refusal to arbitrate controversies in the coal industry, whether in anthracite or bituminous fields.

"He does not and cannot deny that under the check-off there is deducted for the benefit of his organization from the monthly pay of the individual miner throughout the country, sums running from \$2.25 in Indiana up to \$43.86 in Washington. In some districts the miner pays more for his union dues and assessments under the check-off than he does for the rent of his home."

As to Mr. Lewis' allegation that the operators association had a "slush fund" of \$10,000,000, Mr. Brydon said that in his recently published report to the National Coal Association he stated that the bituminous operators of the United States were spending from \$5,000,000 to \$10,000,000 in complying with the requests of the United States Coal Commission for the detailed statement of their costs and accounts and wages paid to the miners, and that if Mr. Lewis cares to call this money a "slush fund" he is welcome to do so. As for the expenses of the Committee, a full account would be filed with the Commission, and, said Mr. Brydon in conclusion: "It would in my opinion go far toward the solution of the fundamental problem of the coal industry if the funds collected by Mr. Lewis, by means of the check-off and their application, were accounted for in a similar way."

It is true that the check-off system is unique, for it is the only instance of any trade union representing a large number of men insisting that employers collect union dues by deduct-

ing them from the contents of the pay envelopes of the miners. Evidently the miners' union officials feel that they do not enjoy the confidence and respect of the members of the organization when they feel obliged to have the money taken from the pay of the miners, willy nilly.

And, it may be further remarked, there are other trade union organizations in which members, feeling that they are compelled to be members whether they like it or not in order to have employment, would likewise cast a vote heavily against some of the customs which union officials, scheming to hold their official positions, seek to drag them into when they do not personally approve. Under such conditions a union becomes merely a padrone system under another name.

COUNTRY NOW CONSUMES ITS BEEF PRODUCTION.

GROWTH of population in the United States to a point at which the domestic market has become large enough to absorb the country's normal beef production is the chief reason why American beef is no longer an important source of supply for Great Britain, states the Department of Agriculture. Another factor working against an increase in our beef exports is the lower cost of beef production in countries like Argentina which are still in the pioneer stage.

From 1891 to 1921 the population of the United States increased from 62,948,000 to 107,833,000, while the number of cattle in the country increased only from 51,363,572, to 66,652,559. It is thus obvious it is stated, that the growth in population has absorbed the increased beef production, and the same is true of mutton. Our increased production and exports of beef during the war proved that given the stimulus of a profitable market the American livestock grower can and will quickly expand his beef output, but many factors are at present diminishing his incentive to do so.

Among these factors the most important is the relatively high cost of beef production in the United States compared with its cost in countries now in the pioneer stage. This fact, it is reported, has convinced the meat trade of Great Britain that the future will see greater and greater production in Argentina, until the supply from that country overshadows that from any other source. Next in importance as sources of additional supplies are Australia and New Zealand.

At the present time the United States is almost exactly self-sufficient in the matter of its beef supply. As the country becomes more industrialized, home consumption will be increased. Whether in that case the livestock grower will have a strong motive to engage in competition for the export trade will be determined by many factors, among which the report cites the possibility of more efficient beef production methods coming into use, the younger age at which beef cattle are now slaughtered, and the relation of the dairy industry to cattle raising generally.

As an exporter of pork and pork products, the United States is likely to retain its preeminence for many years. However, with the rehabilitation of agriculture in Europe, our exports of these commodities, which have been very large in the last few years, will be adjusted to post-war conditions. Average shipments of American pork and pork products to the United Kingdom from 1910 to 1914 were about 450,000,000 pounds, while in the fiscal year ended June 30, 1922, the shipments were 676,000,000 pounds.

In 1913, before the war, the total exports of pork and pork products of the United States amounted to approximately 1,020,778,000 pounds. For the fiscal year ended June, 1923, the total exports of pork and pork products of the United States was 1,767,306,000 pounds.

THE COTTON SHORTAGE BY REASON OF THE BOLL WEEVIL HAS ENORMOUSLY ENHANCED THE VALUE OF THE SOUTH'S COTTON CROP.

PRESIDENT BARTLETT of the New York Cotton Exchange issued a statement a few days ago, that the damage to the present crop of cotton by the boll weevil based on the present price of cotton would be approximately \$750,000,000.

That is a thoroughly misleading conclusion. Every statement which we have seen put out as to the loss to Southern farmers by the boll weevil during the last five or six years is like this one, based on an erroneous assumption.

If there had been no boll weevil to cut short the South's cotton crop this year, we might perchance have raised on the acreage planted 14,000,000 or 15,000,000 bales. A crop of that size, even in anticipation, would have knocked the price down to probably 8c a pound, certainly to 10c. A 15,000,000 bale crop at 10c a pound would have meant an aggregate of \$750,000,000 to Southern farmers for their cotton crop. An 11,000,000 bale crop, which is approximately the present estimate on the basis of 20c a pound, though it is now selling at 25 cents or over and should command 30c a pound or more, would be worth at least \$1,100,000,000, or at 25c a pound would be worth over \$1,300,000,000. Thus instead of a loss to the farmers of \$750,000,000 by reason of cutting short their cotton crop through the ravages of the boll weevil, they have actually made by this shortage a gain of anywhere from \$350,000,000 to \$600,000,000, over what they would have received for a big crop at low prices.

We do not believe that anyone would for a moment question the probability of cotton having gone down to 10c or lower on a 14,000,000 or 15,000,000 bale crop. By reason of the shortage of the cotton crop due to the boll weevil's activities, this year's crop will yield not less than \$1,250,000,000 and possibly much more. If there had been no boll weevil, it would hardly have brought as much as \$750,000,000.

Individual farmers and individual sections will lose tremendously. We have one friend who two years ago planted and cultivated for 3000 bales but he got only 200 bales. That meant almost bankruptcy to him. Similar conditions exist in many other cases and some whole counties have almost abandoned cotton growing, but when one undertakes to figure out a loss of \$750,000,000 to the South by reason of this year's boll weevil's activities or a loss of \$5,000,000,000 or \$6,000,000,000 during the last ten years, as some have done, he overlooks the fact that the boll weevil is the only thing that has saved cotton from selling at a price far more unprofitable than wheat is now selling for.

The folly of cotton growers in the South year after year in planting large acreages would have utterly ruined a large proportion of them by reason of low prices if they had produced an average yield per acre.

The boll weevil is a great curse to the cotton trade of the world. It must be overcome in order to save the world's cotton supply but if the boll weevil drives Southern farmers away from the policy of putting too much acreage into cotton and forces them into growing other things, it will in the end have proved a blessing rather than a curse. It is a heroic remedy.

It has been impossible to force Southern farmers into reducing their acreage to a sufficient extent to enable this section to grow only as much cotton as the world will take at a profitable price. If this country consumed, say 40,000,000 tons of pig iron a year and the manufacturers of pig iron insisted upon producing 60,000,000 tons every year, they would force prices down to a point where all of them would go into bankruptcy. But they have better judgment, and when the market will not take their iron at a profit, they

shut down their plants. The farmer must learn the same lesson, viz., to decrease his acreage, whether it be in cotton or wheat or other things, whenever the demand will not absorb at a profit to him the output of his farm.

But let us get rid entirely of the thought that this year's boll weevil has cost the South \$750,000,000, for it has not done any such thing.

DOES HE DESERVE A PENSION OR A PRISON?

SENATOR HENRIK SHIPSTEAD, of Minnesota, publishes a letter received from one of his farmer friends showing his farming operations and this letter is heralded as though the losses experienced as given by this Western farmer applied only to farmers. As a matter of fact, tens of thousands of business men, merchants and manufacturers have passed through exactly the same experience that this Western farmer relates as though he and other farmers were the only ones that have suffered from business depression.

This farmer writes that he arrived at Perham in 1890 from Scotland, his total assets consisting of a wife, three children and \$12 in cash. He began farming and for a while made a success of it. He also made a very eminent success in increasing the number of children, for he had twenty, of whom seventeen are still alive, with thirty grandchildren and three great-grandchildren. Evidently there has been no shortage in family growth since he landed in America.

In 1917 he had accumulated enough to have lost by fire fourteen or fifteen thousand dollars with only sixteen hundred dollars insurance. That shows that he was a very poor business man. During 1921 and 1922 his farm ran considerably behind. His present farm consists of two hundred and thirty acres and he carries \$9000 insurance on buildings, stock and machinery. He reports that he now has as investment of \$28,400 with \$6000 or \$7000 personal property, but that during 1921 and 1922 his wheat and live stock sold below the actual cost of production and therefore he is running behind, with expenditures exceeding receipts and he adds: "It is hell, Doctor, to have put in a long and useful life and to face the poor house at sixty-nine years of age. Uncle Sam surely looks after his subjects."

This letter is published by "Public Affairs" as indicating the conditions which brought about the election of Senator Shipstead and the recent election of Magnus Johnson. The farmer who wrote this letter had evidently been reading many stories which posed the farmer as the only financial loser during the period of deflation. We are not at all unmindful of the tremendous losses of farmers and we fully appreciate the necessity of saving our agriculture from being run at a loss, but it would be well if the farmers of the country would realize that business men have suffered about as much as the farmers.

Thousands of manufacturers have seen every dollar, the accumulations of a lifetime, wiped out. Thousands of merchants have passed through the same disaster and struggle, but neither manufacturers nor business men generally, who have had to suffer these losses, have suggested that the United States government must stabilize the price for their pig iron or steel or the thousand and one other things which they manufacture. Nor have the merchants of the country suggested that the government should stabilize the price of their goods, which they have many times been unable to sell except at a figure below the purchase price.

There is no solution in government for these economic problems. The government cannot stabilize prices and cannot buy up either wheat or cotton and store it for a future market. In 1914, when the practical cessation of trade for a while between this country and Europe struck the cotton

market at the time of its biggest crop, a United States Senator from the South spent an hour or more begging the writer of this to take the ground that the United States government must buy from 3,000,000 to 5,000,000 bales of cotton and store it. "Cotton," said he, "will keep for fifty years. Unless the government buys and takes, off the market a large proportion of this enormous crop the entire South will be bankrupt. The government will lose nothing by the purchase, for eventually cotton will go higher than the present figures, etc."

"In reply we said that we were opposed to the government undertaking to stabilize the price of cotton by buying 3,000,000 bales or any other quantity; that we had no fear that the South would be bankrupt; that the inherent strength of the South was too great for its whole people to be forced into bankruptcy even if they lost an entire cotton crop. We protested over and over again against the wild scheme of "buy a bale at ten cents a pound" as a beggary proposition posing the South before the nation as lacking backbone and pleading for help on a basis of charity.

That position has been fully sustained since. The South did not go into bankruptcy. It did pull itself through and did come to regard the "buy a bale at ten cents" movement as pauperizing the thought of the South and making the nation believe that this section was so desperately poor it could not protect or carry one crop of cotton.

We take exactly the same position in regard to the wheat crop. The government cannot buy and store 200,000,000 bushels or any other quantity without doing far more harm than good. It cannot go into the markets and deal with these economic questions without breaking down the safeguards of the nation. Every section of this country has in the past had to face periods of financial depression. Probably every business man in the land over and over again has had to face conditions far worse than those of the Minnesota farmer, who thought what he told was such a piteous tale.

During the years of deflation many of the great manufacturing interests of the country counted their losses by the millions and tens of millions, but they did not ask the government to stabilize or to buy up their product and store it for the future. They faced the situation as men of backbone always do and always will. The individual man may sometimes go down in the struggle and every man who has had any business experience has had to face that condition from time to time and most of us have passed through it more than once, if we have been in business for any length of time. But business men do not appeal to the government to buy up their stuff, nor to stabilize their prices, and the farmer must get out of that idea. That is not the road to success nor to honor.

This Western farmer, who has been able to raise twenty children, with thirty grandchildren around him, must have had a pretty lively time buying shoes and clothes. Any city man who tackled that job would be in the poorhouse long before the twentieth child arrived and some of them would feel like the old darky who was seen holding a little baby in his arms. A passer-by said: "Uncle, what is the name of your child?" and the old man said: "Judas Iscariot." The questioner held up his hands in horror and protested against naming a child Judas Iscariot. "Well," said the old darky, "I read in the Good Book that it said of Judas Iscariot that 'it would have been better for that man if he had never been born' and as this is my thirteenth child I thought that way about him." Most folks would have felt a little that way long before the arrival of the twentieth child, to which the Western farmer admits he is father. If Roosevelt were alive it is altogether probable that he would have asked of Congress a pension for this Western farmer, but the real question is whether the father of 20 children (pity the mother) deserves a pension or a prison.

AN AWAKENING SPIRIT THROUGHOUT THE SOUTH.

MR. FRANK A. PIERSON, Secretary of the Chamber of Commerce at Columbia, S. C., in a letter to the MANUFACTURERS RECORD gives the following bit of interesting information in regard to the effort that is to be made in that state under the leadership of Gov. McLeod for broadly advertising South Carolina. Mr. Pierson writes:

"Advertising South Carolina to the world will be the topic of discussion at a statewide conference to be held in Columbia, the capital of the state, September 13. The call for the meeting is being issued at the suggestion of Governor Thomas G. McLeod by the South Carolina Commercial Secretaries Association which holds its annual convention in Columbia on the 12th.

"It is planned to raise a sum of \$100,000 for the purpose of conducting an advertising campaign, telling the world what South Carolina offers in raw materials, to describe its progress of recent years and to exploit its advantages for industrial and commercial development.

"The South Carolina Bankers Association which is interested in the campaign has forwarded the suggestion of raising \$50,000 by subscription and securing the other \$50,000 from the State Legislature. This will be one of many plans discussed at the conference."

Throughout the entire South there is an awakening of a spirit such as has not been seen since the early eighties, for attracting the attention of the world to the South and of stimulating the activities of Southern people. Between 1880 and 1890 the whole South was literally alive with a spirit of activity and the people of the South themselves were untiring in their efforts to develop their own resources and to draw men and money from other sections. After the panic of 1893 there came a long period of inactivity in such work. Railroads to a large extent dropped out of the kind of campaign they were then carrying on, or at least they have done so during the last ten years. Towns and states also have lingered by the wayside, but during the last few months there has been a revival of the old spirit, which was so dominant between 1880 and 1890, to stir the South to a full realization of its own resources and to make these facts known to the world.

We congratulate the people of South Carolina that Governor McLeod has taken the lead in the matter and we trust that every governor in the South will follow his example in seeking to stir into vigorous activity the latent powers of the South for material upbuilding.

DAIRY PRODUCTS CENSUS, 1921.

IN 1921 the total value of the butter, cheese and condensed milk products of the United States, in establishments having an output of \$5000 and over, was \$738,440,107. The total value of similar dairy products, according to the Census of 1919, which included establishments with products valued at \$500 and over was \$1,066,125,489, in 1914, \$364,285,150 and \$273,557,718 in 1909. The production, in volume, of butter, unsweetened condensed milk, and powdered milk in 1921 was the largest on record, though the quantity of cheese and condensed milk while being smaller in 1921 than the output of 1919, is far in excess of the production given in previous census reports.

PRODUCTION DAIRY PRODUCTS.

| Product | 1921* (pounds) | 1919† (pounds) | 1914† (pounds) |
|----------------------|-------------------|-------------------|-------------------|
| Butter | 1,118,203,696 | 920,550,066 | 789,809,781 |
| Cheese | 423,360,054 | 473,569,199 | 370,278,599 |
| Condensed Milk | 581,206,621 | 934,586,856 | 599,762,869 |
| Evaporated Milk | 1,177,333,866 | 1,215,595,389 | 273,647,635 |
| Casein, dried | 9,729,129 | 16,615,076 | 18,570,220 |
| Powdered Milk | 60,985,251 | 48,385,548 | 20,454,051 |
| Sugar of Milk | 5,010,668 | 10,401,416 | 4,051,320 |

* Includes only output of establishments with annual production of \$5000 and over. † Covers all establishments reporting products valued at \$500 or more.

HE

r of
NU-
in-
that
ver-

opic
um-
the
nor
ere-
in

ose
orld
its
in-

ter-
ais-
000
ans

f a
for
of
880
irit
un-
to
nic
ork.
of
ave
also
ths
so
full
acts

ov-
we
ex-
ent

used
nav-
otal
of
at
and
ter,
was
con-
of
ons

†
(s)
781
599
869
635
220
051
320
tion
ucts

CINCINNATI AS SEEN 40 YEARS AGO AND TO-DAY.

PERHAPS the most daring railroad enterprise ever undertaken by any single community was the building by the city of Cincinnati of the Cincinnati Southern Railway in the early '80's.

That road is today the longest railroad in the world owned by a municipality. The building of that road practically saved Cincinnati from being completely cut out of its Southern trade. As a municipally owned railroad estimated to be worth today \$100,000,000 it is a saving factor in the trade of a great city, and for the historical interest connected with its building and its operation we are giving a history of this enterprise and in connection therewith some facts in regard to the city of Cincinnati.

It is an interesting fact that shortly after the first railroad was built nearly a century ago, the people of Charleston, S. C. became impressed with the importance of building a line from that city to Cincinnati. Many of the far-seeing South Carolina men of that day believed that unless conditions were changed, a war between the North and South would be inevitable in the years to come. Some of the foremost statesmen of South Carolina felt that if the South and the West could be brought into intimate business touch, the acquaintanceship thus developed would make war impossible. Cincinnati was the dominant city of the West at that time as Charleston was one of the foremost cities of the country in those early days when South Carolina had many great statesmen with a vision which looked far into the future.

In undertaking to promote the building of a road from Charleston to Cincinnati from these patriotic viewpoints as well as that of economic development, South Carolina spent a large amount of money on the enterprise but the scheme of building a line from the seaboard at Charleston to the then center of the West at Cincinnati was too big and daring and costly for that day, and for years this undertaking was abandoned. Later on the thought was revived that such a line would be of inestimable value to the whole country and the Charleston, Cincinnati and Chicago Railroad was projected and on it millions of dollars were spent, but that was also ahead of the times and of the money then available for such an enterprise.

In the '70's some of the far-seeing men of Cincinnati realized the danger to the trade of that city by railroad developments which had taken place in the shifting of the center of the grain trade and the packing industry. They saw that being on the border of the South, Cincinnati must look largely to the development of trade with the South. The history of the effort of the long struggle in Cincinnati to awaken the whole city to this situation and to bring about the building of the Cincinnati-Southern from Cincinnati to Chattanooga is a romance of railroad and industrial development which has few equals in all the world of railroad building. It was a daring undertaking. It would never have been completed but for the untiring zeal and the indomitable courage of one man. He never permitted discouragement and opposition to lessen

his enthusiasm. Eventually the road was completed. It made a turning point in the history of Cincinnati. It helped to save that city from retrograding and to make it one of the outstanding industrial and business centers of the West.

In 1883 Cincinnati determined to make a special feature devoted to the South in its industrial exposition. This proposition immediately attracted wide attention throughout the South. The MANUFACTURERS RECORD as a fledgling newspaper, hardly more than a year old, saw the value of this proposed exposition to the development of trade between the South and Cincinnati and we suggested to the management of the exposition that the MANUFACTURERS RECORD would issue a special edition entitled "Souvenir Edition, Eleventh Cincinnati Industrial Exposition." The offer was immediately accepted and on August 25, 1883, the last issue in that month, that edition was published. Today, forty years later, in this the last issue of August, 1923, we are reviewing some of the history of Cincinnati and the remarkable development of that city.

Turning back to our issue of August 25, 1883 we find an extremely interesting and illuminating history of the Industrial Exposition of Cincinnati, beginning with the organization in 1828 of the "Ohio Mechanics Institute" "to promote improvements in manufactures and in mechanical art." Ten years afterward or in the Spring of 1838, the first Exposition was held. Out of that early beginning of the concentration of Cincinnati's attention upon industrial interests, there has been a continuous, unbroken line of development. Later on a great structure called "Cincinnati Industrial Exposition Building" was erected and in this, year after year, these industrial expositions were held. The exhibition held in 1860 was the eighteenth in the series after 1838 and the last that was held under the management of the Mechanic's Institute alone, and though conducted in the shadow of gathering war clouds it was an eminent success in all its features.

In 1869 an exposition of textile fabrics proved to be a remarkable success. These expositions had influence in stimulating the industrial trend of the thought of the city and in building up its manufacturing interests. In this may be found a lesson for every city in the country striving to create an industrial atmosphere.

The Exposition of 1882 had exhibits from thirty-three states and territories. It was then decided that the Industrial Exposition of 1883 should be on a more elaborate scale with a special invitation to the South to be represented by a display of its resources and products. In our special issue on that Exposition in an editorial discussing the construction of the Cincinnati Southern Railway from Cincinnati to Chattanooga, it was said:

"Some years ago Cincinnati, finding that through the building of railroads calculated to work against her interest she was likely to lose her hold upon the trade of the South, boldly determined not to wait for individual enterprise to do it, but to construct a direct line to the trade and industrial centers

of that section. This gigantic enterprise—the largest, if we mistake not, ever successfully carried out by a single city—has wrought great changes in the trade not only of Cincinnati but of many other cities. The completion of this road united Cincinnati so closely to the Central South that she is now looked upon almost as a Southern city endowed with Western push and enterprise. * * *

"The geographic position of Cincinnati is peculiarly and favorably situated at the confluence of the Ohio, the Miami and the Licking rivers. She naturally controls the trade of the rich Ohio Valley with all its vast wealth. She is in easy access to what is probably the richest mineral region in all of our country, while timber almost inexhaustible in quantity and of every variety is within convenient reach. Her rivers furnish the cheapest transportation facilities known for the raw material to her factories, and thence back in the shape of manufactured goods to the vast army of consumers that draw their supplies from Cincinnati."

These things and many others of similar import might be repeated today, for as the years have passed they have served to emphasize the strategic location of Cincinnati, and the energy and enterprise of her people have carried forward her industrial and commercial development to a greater extent than could have been foreseen forty years ago when the statement we have just quoted was written in this office.

The attention of the editor of the MANUFACTURERS RECORD had often been attracted in earlier years when engaged in other newspaper work to the development of the grain and packing trade of Cincinnati, and more especially through a close study which he had made for years of the Cincinnati Price Current edited by Charles B. Murray, then the outstanding statistician of the country on the grain and packing trade of the United States. He had followed with very keen interest the agitation for the building of the Cincinnati Southern road and the movement for the development of larger trade interests with the South, and was thus prompted to welcome the opportunity of seeing the South's resources presented at such an exposition.

During a recent visit to that city a member of the editorial

staff of this paper long thoroughly familiar with business conditions in Cincinnati undertook to prepare a comprehensive historical story in regard to the building of the Cincinnati Southern. It seemed appropriate that this should be done in view of the awakening interest here and there throughout the country in municipally or state owned enterprises, especially docks, and wharves and warehouses and in the case of North Carolina of a projected \$10,000,000 state owned road.

What Cincinnati did more than forty years ago in the building of the Cincinnati Southern is of historic interest and we are giving this story as one which today is of world wide importance. In connection with this history of the building of this notable railroad, we are able to publish a very interesting review on the development of the industrial, mercantile, financial and educational interests of Cincinnati by Monte J. Goble, Vice-President of the Fifth-Third National Bank of that city.

Some months ago Mr. Goble in a letter to the MANUFACTURERS RECORD referring to some statistics given in its Blue Book of Southern Progress suggested that Cincinnati was so close to the South and so intimately identified with the South that it might almost be called a Southern city and might therefore have been included in the list of Southern cities which had shown remarkable development during the last twenty years. Since the Blue Book of Southern Progress was confined strictly to the sixteen Southern States, we could not follow Mr. Goble's suggestion in full but we are doing better than that by giving this Cincinnati story today as one of interest to all sections, the South and the West and the North alike—for here is what has been called "the most northern of southern cities and the most southern of northern cities." It is practically on the dividing line between the great West and the great and ever-growing South.



A VIEW OF SOME OF THE BRIDGES OVER THE OHIO AT CINCINNATI.

Cincinnati Has the Longest Municipally Owned Railroad in the World.

THE BUILDING OF THE CINCINNATI SOUTHERN, NOW ESTIMATED TO BE WORTH \$100,000,000, ONE OF THE MOST DARING ENTERPRISES EVER UNDERTAKEN BY ANY CITY TO PROTECT AND DEVELOP ITS TRADE.

A History of the Struggles which Culminated in the Construction of This Vital Link Between the North and the South.

By ALBERT PHENIS.

Cincinnati, with present vigorous activities in financial, commercial, manufacturing and building construction lines, is now, as always, deeply concerned in the development and prosperity of the South. Though on strictly Western or Northern soil, Cincinnati is so closely related with the South that it was spoken of by Monte J. Goble, Vice-President of the Fifth-Third National Bank of Cincinnati, in a statement to the MANUFACTURERS RECORD recently, as the most southerly Northern city and to all intents and purposes the Southern city farthest north. And this identification with and dependence upon the South has been recognized by Cincinnati since the days when the railroads began their encroachment upon the steamboat traffic of the rivers, with threatened changes in trade routes and trade centers that were soon seen to be inevitable.

As far back as the early thirties of the last century, when Cincinnati led all the cities to the west of her in population and commerce—a position she continued to hold up to the time of the Civil War, the Census of 1870 for the first time giving St. Louis and Chicago a lead over Cincinnati—the necessity for a railroad from Cincinnati to the South was recognized. So persistent was the determination to secure a railroad from Cincinnati into the South that in spite of panics, wars, and nearly overwhelming obstacles, and almost total hopelessness of the people at times, the determination finally culminated in the construction by the city of Cincinnati herself of the Cincinnati Southern Railway, from Cincinnati to Chattanooga, 336 miles, and its formal opening to the public in 1880.

"At the time the undertaking was begun," says one commentator, "it was the boldest experiment ever made in municipal activity," and it is today the only trunk line railway in the world owned by a municipality. The construction cost of the railroad paid by the city was \$18,300,000. This amount has been reduced until now the bonded indebtedness owed by the city on account of the railroad is \$14,923,000. The road is under lease till 1966 on terms by which the city receives more than half a million dollars a year above interest charges. It is one of the best built railroads anywhere, and has high earning power per mile. The present replacement value of railroad, terminals and betterments is put at \$100,000,000. Within a few years the city's indebtedness will have been extinguished and it will be in receipt of more than a million dollars a year net from rentals and will own a free and clear property worth by that time more than

\$100,000,000—surely a justification for the faith of the founders in their "experiment as unique as it was remarkable," to quote the language of a student of adventure.

Of this outstandingly bold undertaking and the effects on the city from its successful fruition, a brief historical résumé is of interest as bearing on the Cincinnati that was and the Cincinnati that is and is now likely to become.

More than to any other individual, influence or combination of factors, the inception and completion of the Cincinnati Southern Railway is to be credited to the vision, sagacity and dauntless courage of Edward Alexander Ferguson, a Cincinnati lawyer of marked ability, who literally sacrificed every other interest in life to the building and operation of Cincinnati's railroad. He it was who pointed out the way by which the city could engage in the undertaking and his Ferguson bill was the initial move that was made. Putting aside material interests, political preferment and high possibilities in his profession, he worked and fought unceasingly for the railroad. Never swerved by the vacillating clamor of public opinion; unawed by the opposition at times of influential individuals, heavy tax-payers, commercial organizations, the newspapers and the State Legislature; standing alone on occasion against all the other members of the Board of Trustees, on which Board he served from its creation until the time of his death within recent years, he above all others stood steadfast and unshakable in the determination to build and put in operation the Cincinnati railroad.

Born in New York in 1826, he was taken with his parents to Cincinnati in 1830. In a public statement made in 1878, while the Cincinnati Southern was laboriously struggling toward completion, Mr. Ferguson, in answer to a question as to how he first became interested in the project, said:

"The first public event that I have a recollection of in Cincinnati was the illumination in February, 1836, because the Kentucky legislature had just then passed the charter of the road known as the Cincinnati, Louisville and Charleston Railway. It was to be a road from Charleston to some point in the interior of Kentucky, after crossing the Blue Ridge, and then to have three branches—one to Maysville, one to Louisville and another to Cincinnati. I was a mere boy at the time, and I was thoroughly impressed with the splendor of the illumination; the snow began to fall about dusk, and it was the most beautiful sight of the kind that I ever witnessed. From that time forth I have been a Southern railway man. A Southern railroad has been the

chronic want of Cincinnati. In my judgment, without a Southern railway, Cincinnati, comparatively speaking, would be a pleasant, educational, cultured town, a good place for a man of means and family to retire to. Without it, as a commercial city, relatively, Cincinnati would be nothing. * * * The great want of the city was a railroad to establish an empire of trade, and that empire of trade was the South: that was the only place for Cincinnati trade."

From 1830 the varied efforts to put Cincinnati into touch with the South by railroad failed. The Cincinnati, Louisville & Charleston Railway, which had aroused such favor in Cincinnati, was headed by Robert Y. Hayne, whose fame had been fixed by his debates with Daniel Webster a few years

by which time the Louisville & Nashville Railroad had built a system of lines and was rapidly transferring to Louisville merchants the Southern trade Cincinnati had previously enjoyed, the plan was adopted to raise a million dollars by private subscription to extend as far as Knoxville, Tenn, lines already existing in Kentucky, which would have the effect of giving Cincinnati a practically independent line into Southern territory. Subscriptions lagged, however, and with only a little more than half of the million subscribed, the rumblings of the approaching war halted the undertaking, and with the war actually on this project died.

The lack of a Southern road from Cincinnati was keenly felt by the Government in its military operations, so much so



CINCINNATI'S FOUNTAIN SQUARE.

before, while a United States Senator from South Carolina.

With all Southern leaders of that day the construction of railroads was urged and aided in every possible way. Some of the earliest lines built in the United States were constructed in the South and even those which were not finished till long after the Civil War were built along substantially the same routes that had been selected by the early projectors.

Before plans for the construction of the Hayne railroad could be perfected the panic of 1837 occurred and carried this along with many other projects to destruction. During the succeeding twenty years various plans to build a road or secure an extension of an existing line to Cincinnati were urged or mentioned, but never adequately pushed. In 1859,

that one of the early messages of President Lincoln to Congress recommended the construction of such a railroad by the Government as a military necessity. Surveys were made and other steps taken, but in the absence of active urging by Kentucky and Ohio Congressmen and because of emergencies in other fields of the war, no action was taken by Congress.

Cincinnati losses by the war were little short of appalling. Not only was Southern trade cut off, but the enormous development of the West and Northwest, with the rapid and extensive construction of railroads and the establishment of new industrial and trade centers, robbed Cincinnati of the leadership held in many lines from the founding of the city.

built
Louis-
ously
rs by
Tenn,
e the
into
with
, the
king,
eenly
ch so

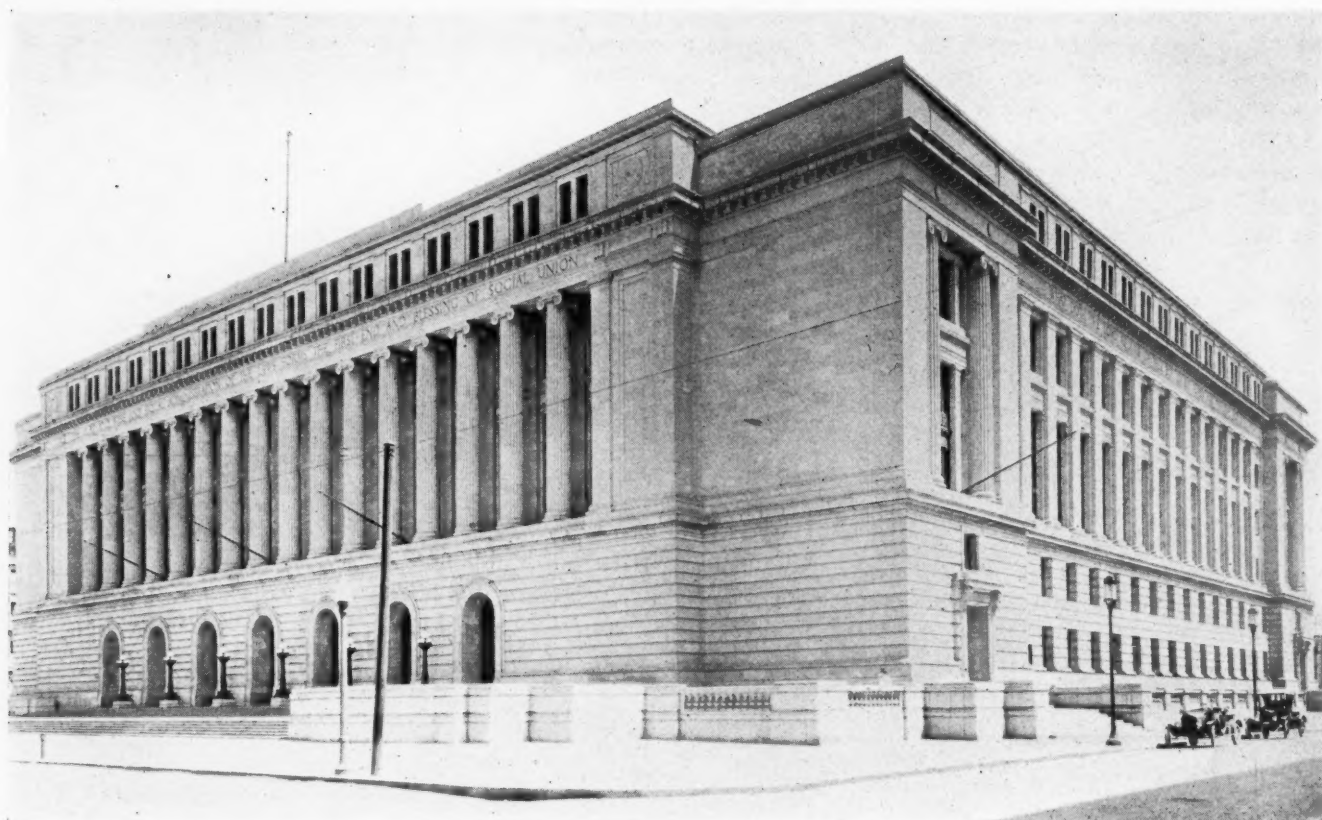


a to
road
were
ctive
e of
ken

ling.
evel-
and
t of
the
city..



OFFICE BUILDING SECTION OF THE CITY.



COURT HOUSE.

In former years her merchants reached out for trade into the Northwest as far as Montana and in all the West she was the Queen City. All this had been changed and even the packing houses, wherein she had once ranked supreme, were now being located in Indianapolis, Chicago and Kansas City.

No wonder under these circumstances that Cincinnati once again turned her eyes to the South as her only salvation, and that a Southern road was everywhere considered a dire necessity. There had been such reckless subscriptions to all sorts of undertakings that a new Ohio Constitution, adopted in 1850, contained an article to the effect that "the General Assembly shall never authorize any County, City or Township, by vote of its members or otherwise, to become a stockholder in any joint stock company, corporation or association whatever, or to raise money for or loan its credit to or in aid of such company, corporation or association."

In discussing with a group of Cincinnati business men the necessity for a Cincinnati Southern Railway, and hearing their regrets that the Ohio Constitution prevented Cincinnati from doing anything in behalf of such construction, Mr. Ferguson expressed the belief that the limitations of the Constitution were not clearly understood. He had just prepared a brief in a railroad case, and in the course of its preparation he had considered the constitutional and legal questions involved in the subject of a city building a road. He had reached the conclusion that the city itself could build and own a railroad, just as it could build or buy and operate gas works, or waterworks, while it could not invest any funds in any corporation which might own gas works, waterworks or a railroad. He therefore proposed to draw up a bill for presentation to the General Assembly or Legislature, authorizing Cincinnati to build and own its own railroad.

This he did, and it was acclaimed with enthusiasm by the Cincinnati newspapers, the commercial organizations and by the people generally.

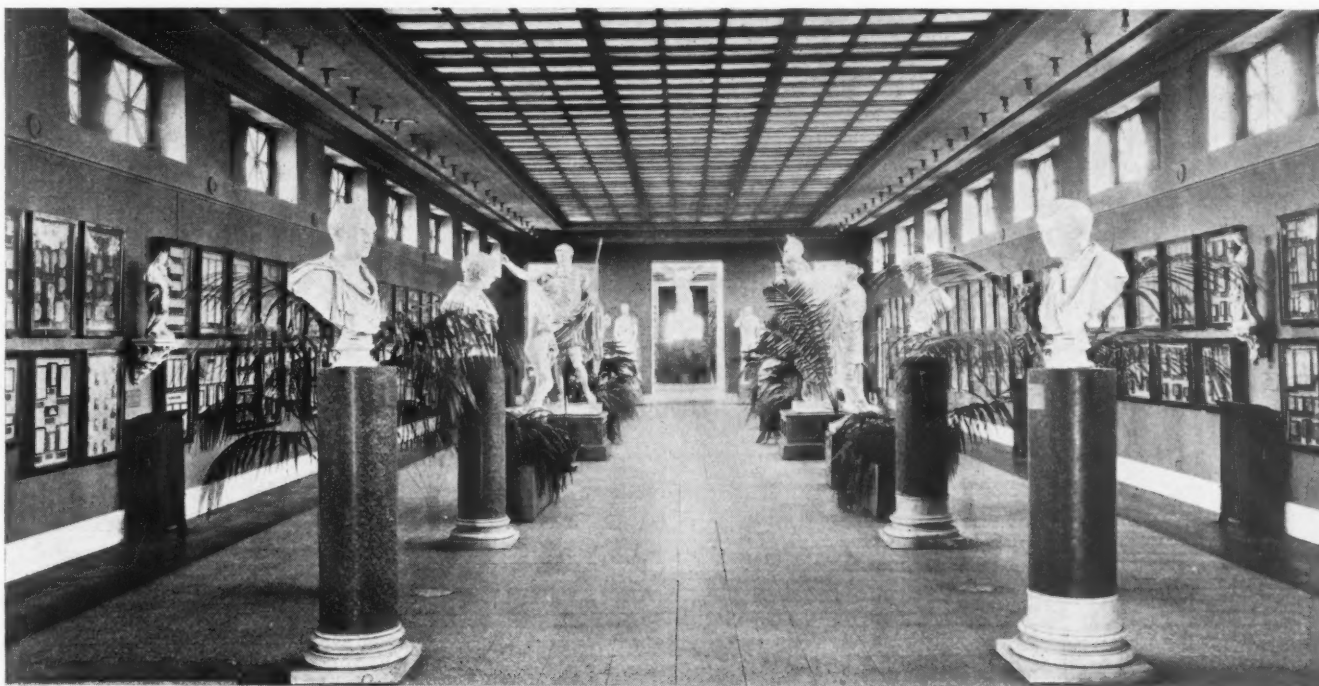
After some delay this Ferguson bill, as it was thereafter known, became a law on May 4, 1869. The bill provided that in any city of Ohio of more than 150,000 inhabitants, if the city council thereof should by majority vote declare it to be essential to the interests of such city that a designated railway should be built between designated termini, a Board of Trustees, not removable without cause, should be appointed by the Court, with authority to borrow not exceeding \$10,000,000, and to issue bonds therefor in the name of the City, provided the question of building the road be submitted to the voters and receive a majority of the votes cast. An interpolation by the legislature provided that bonds should never be sold at less than par and another interpolation placed the interest rate at not to exceed 7.3 per cent, both of which provisions proved highly detrimental thereafter when efforts were made to sell the bonds in Europe.

The bonds were to be secured by a pledge of the faith of the city and by a mortgage on the line of railway and its net income, and the city council was required to levy a tax which with the income from the railway would be sufficient to pay the interest on the bonds. The disbursement of the funds was in the hands of the trustees and they were empowered to receive donations of money, land, bonds, etc.; to construct a line or to acquire lines of road already built, and to lease the road on completion or portions of it temporarily until such time as the entire line was finished.

The City Council acted promptly, and Chattanooga was chosen as the Southern terminus. An early election was called to vote on the proposition, and on June 26, 1869, amid

the clanging of bells and the wildest enthusiasm, the city gave the overwhelming vote of 15,435 for and only 1500 against the measure. Four days later the Superior Court named the Board of Trustees, of which Mr. Ferguson was

the expenditure on which by 1878 had laid a burden on the taxpayers amounting to a little less than \$4000 per day for interest charges on the bonded indebtedness. It was not until August of 1878 that Ferguson and other road adherents



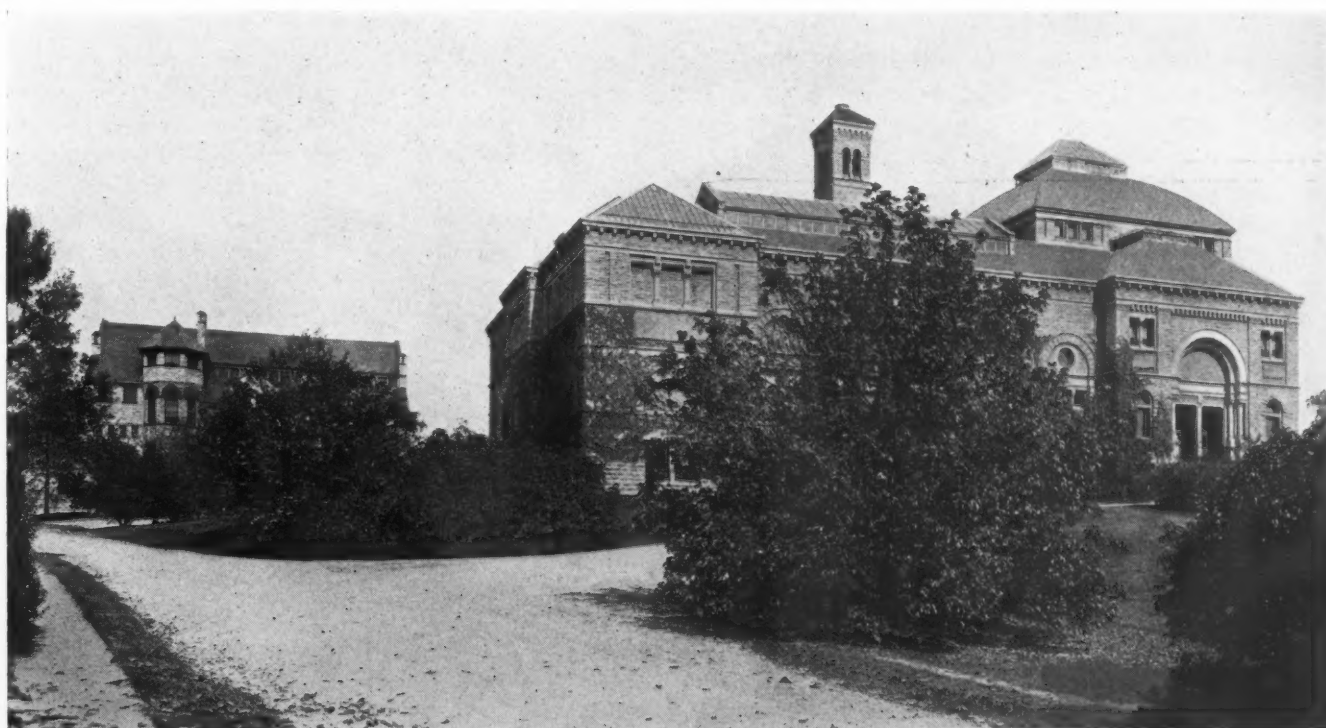
INTERIOR VIEW OF ART MUSEUM.

one, and the other four were men of public spirit and influence.

And now followed ten years of strenuous effort, with occasional bitter struggles to keep the project alive and with clamor at times for the abandonment of the whole enterprise and the forfeit of the millions invested by the city rather than a continuance of an uphill attempt to complete the line,

finally overcame the last opposition and went forward then to the completion, leasing and operation of the finished road.

Placing surveying parties in the field was the preliminary work first begun, but the passage of an enabling act by the legislature of Tennessee and Kentucky was essential to the successful sale of the bonds, and while Tennessee promptly passed the act during that first autumn, the Kentucky legisla-



THE ART MUSEUM AND THE ART ACADEMY.

ture rejected the bill. The most bitter and determined opposition developed on the part of rival interests, and it was only after a most vigorous series of campaigns that favorable legislation was secured from Kentucky February 4, 1873, nearly four years after the Board of Trustees had begun operations.

In January of 1871 the superior court, in an opinion rendered by Judge Alphonso Taft, the father of Judge and Ex-President W. H. Taft, held that the supplementary acts were constitutional, and in December of that year the Ohio supreme court sustained the judgment of the lower court.

No bonds had been offered up to this time, the necessary expenditures having been paid out of advances made by the City Council and in one or two instances through loans at a bank on personal notes given by Mr. Ferguson and indorsed by the other Trustees. Indeed, the very first money put into construction work was \$50,000 negotiated by Mr. Ferguson with a Cincinnati bank, with which work was begun on the Kings Mountain tunnel—"the actual beginning of the Cincinnati Southern"—as Mr. Ferguson declared.

In August of 1872, \$150,000 of bonds were sold to the First National Bank of Cincinnati at a premium of a little more than 2, and bearing 7 per cent interest. The opinion was expressed subsequently by Philip Heidelbach, member of the Board of Trustees, that had necessary legislation been promptly secured in Kentucky, the entire ten million dollar issue could have been sold in Germany at par at that time.

Efforts to market the bonds in London in the fall of 1872 were unsuccessful, objections being that a 7 per cent bond, was open to suspicion, and that bonds could not be sold through banks at par anyhow. A 5 per cent bond with an attractive discount could much easier be handled in Europe it was declared.

Before any further negotiations could be concluded the panic of 1873 brought widespread ruin and discredited railway securities as an investment, so it was not until the Spring of 1874 that the trustees were successful in placing the bonds. After the panic they were offered at 7.3 interest and \$1,000,000 were sold through the American Exchange National Bank of New York at par less 1 per cent commission. Later the remainder of the bonds were sold through the same agencies, at par less 1½ per cent commission, which yielded to the trustees \$9,858,198.29 when final payments were made in May, 1875.

It had been the original hope of the trustees that the road might be leased to an operative company which would itself finish the construction work, but necessary authority was not given by the legislature, and furthermore the panic of 1873 had bankrupted the railroad capitalists. The trustees therefore gave out contracts for construction and by May of 1875, \$3,539,782.10 had been spent in construction work and there were obligations outstanding amounting to \$5,953,009.75.

The trustees decided to ask legislative authority for the submission to the voters of a \$6,000,000 bond issue. In spite of vehement objection by the newspapers, organizations and individuals, the proposition went through and the voters ratified the additional loan. An amendment was added, however, to the enabling act, which prevented the trustees from

making a contract to complete and lease the whole line. Had they been able to do this it was believed much time and money could have been saved, so that the necessity would not have occurred for a further bond issue of \$2,000,000, which was asked and only with difficulty obtained in August, 1878, after having been once rejected by the voters.

Through the provisions of a Common Carrier act, drawn by Mr. Ferguson, the Cincinnati Southern Railway Company was incorporated in April, 1877, and to this Company the railway, which had been completed from Cincinnati to Somerset, Ky., was leased on the basis of a determinate license and its operation became immediately profitable. It was believed that this Company would be able to enlarge its capital and take over the work of completing the road.

The great railroad strikes of August, 1877, however, again shattered public confidence in railroad investments and with the incomplete condition of the road, for which practically \$16,000,000 had been paid, it was found necessary to spend an additional \$2,000,000 of the city's funds. With this additional capital, when finally secured in 1878, the road was completed between Cincinnati and Chattanooga and on February 21, 1880, the first through freight trains left Cincinnati for Chattanooga.

March 18, 1880, a special passenger train was run from Chattanooga and the South to bring to Cincinnati invited guests to a magnificent banquet in celebration of the opening of the road. There were 1776 Southern men, leading merchants, manufacturers, governors and others at this banquet, held at Music Hall, and the galleries were occupied by the ladies and their escorts. This was the hour of triumph for Mr. Ferguson, who made the principal speech of the evening in response to the toast, "The Cincinnati Southern Railway."

In 1880 a final issue of \$300,000 bonds was authorized for terminals, making a total of \$18,300,000 for the city with the completion of the road. A permanent lessee was sought and on October 12, 1881, the road was leased to the Cincinnati, New Orleans and Texas Pacific Railway Company for twenty-five years. Divided into five periods of five years each, the Company was to pay the City \$800,000 a year rental for the first period, \$900,000 a year for the second, \$1,000,000 for the third, \$1,090,000 for the fourth and \$1,250,000 for the fifth periods. In addition the lessee is required to pay all taxes, charges and assessments levied against the railway; to make all repairs, improvements, renewals, replacements and additions at its expense and is to pay \$12,000 annually to the trustees for the expenses of the trust.

Some years before the expiration of the lease the question of a renewal came up, and on authority of the Legislature the trustees in 1902 extended the lease for sixty years from its expiration in 1906, carrying it to 1966. Instead of \$1,250,000 per annum during the last five years of the old lease, \$1,050,000 was to be paid in quarterly payments, the other \$200,000 to be deferred on payment of \$40,000 a year in quarterly payments of \$10,000. Under the new lease the annual rental was fixed at \$1,050,000 for the first twenty years and \$1,100,000 for the next 20 years, and \$1,200,000 for the third twenty.

It was also provided that the trustees should issue bonds

Had
and
ould
,000,
gust,

n by
pany
the
mer-
and
eved
and

gain
with
eally
pend
addi-
was
Feb-
nati

from
vited
ning
mer-
quet,
the
for
ning
ay."

for
the
and
nati,
nty-
the
the
the
fifth
xes,
make
addi-
the

tion
ture
from
250,-
ease,
ther
uar-
nual
and
hird

onds



FOURTH STREET, CINCINNATI—LOOKING WEST.

of the city to the amount of \$2,500,000 for terminal facilities and betterments, the railroad company to pay the interest and one per cent in addition for a sinking fund for the ultimate redemption of the bonds. By later legislative enactment the trustees were authorized to issue additional bonds up to \$500,000 at the rate of not over \$100,000 a year for completing terminal facilities and making permanent betterments, and subsequently further authority to issue city bonds up to

tion of the lease all of this property will revert to the ownership of Cincinnati.

By refunding of matured bond issues and the retirement of some, the original \$18,300,000 bonded indebtedness of the city on account of the railroad construction has been reduced to \$14,932,000. During six years of the construction period no income was realized from the railroad. This with the high rate of interest of the early bond issues piled up a large



ARCADE TO THE DIXIE TERMINAL.

\$2,500,000 was given by the legislature, all to be taken care of by the lessee company as in the first supplemental issue. The first \$2,500,000 of bonds have been issued at 3.5 per cent, \$400,000 of the second at 4, 4½ and 5 per cent and \$1,250,000 of the third at 4½ and 5 per cent.

With the proceeds of these bond issues terminal freight stations and a connecting viaduct were constructed at Cincinnati, and the bridge across the Ohio river at Cincinnati was rebuilt. The famous high bridge over the Kentucky River was reconstructed entirely. The new bridge is elevated 31 feet above the old, and is 308.3 feet above low water mark. There were twenty-seven tunnels originally, but ten have been eliminated. There are 167.74 miles of additional main track completed and in commission and 272.12 miles of sidings and spurs. The road is equipped with automatic signals for its entire length, the only railway in the United States that can make this claim, so it is declared. Altogether the lessee Company has spent \$18,000,000 in additions and betterments and \$5,400,000 for terminal facilities at Cincinnati. All of the bridges, terminals, improvements, betterments, renewals, replacements and new trackage have been provided without expense to the taxpayers. On the termina-

excess against the railroad. The sinking fund trustees of the city charge the railway interest account with all of the accumulated interest from the issuance of the original bonds to the date of the report, and credit the entire income from the railroad. This statement is carried in each annual report simply to show the net interest cost of the railway to the city, for as a matter of fact, in accordance with an act of the legislature, all net earnings and incomes from the railway are credited to the general interest fund of the city. Showing the steady movement toward the vanishing point by the unfavorable balance between interest and rents and the income received by the railway, the report for December 31, 1916, showed in excess of \$5,483,914.92; 1917, \$4,927,219.92; 1920, \$3,264,334.92 and 1922, \$2,161,744.92.

To sum up, Cincinnati owns a railroad property upon which there has been expended:

| | |
|---|--------------|
| For construction by the city | \$18,300,000 |
| Additions and betterments by lessee | 18,000,000 |
| Terminal facilities at Cincinnati, paid for by lessor | 5,400,000 |
| Total | \$41,700,000 |

On this property the bonded, net interest bearing debt of the city is \$14,932,000. It is receiving annually as rental a sum sufficient to pay the entire interest charge upon this bonded indebtedness and in addition to apply over half a million dollars to the general interest fund of the city. And the railroad is today an important part of the Southern Railway System and is worth \$100,000,000.

Cincinnati's Greatness as Presented by a Cincinnati Banker.

A CITY OF INDUSTRY, ART, MUSIC, EDUCATION, ON THE BORDER LINE BETWEEN THE WEST AND THE SOUTH.

A Central Point for Handling Coal and Iron and Steel, and Producing a Wide Variety of Manufactures.

By MONTE J. GOBLE, Vice-President Fifth-Third National Bank of Cincinnati.

Cincinnati is a great city, great in its favored location as the most southern Northern metropolis, and the most northern Southern city, great in every environment that contributes to the higher expressions of social, professional and business achievement, great as the gateway through which the North meets the South, the East grasps the broad hand of the provident West, and water and rail minimize time and cost in the distribution of commodities to all sections and all countries.

Let us take first transportation and distribution. There are nineteen prominent railroads that serve Cincinnati, these lines being in one or the other of several trunk line systems viz., the Pennsylvania, the Baltimore & Ohio, the New York Central, the Louisville & Nashville, the Chesapeake & Ohio, the Norfolk & Western, the Monon, the Erie and the Southern. Ten lines cover Ohio points, six Indiana, four Kentucky, three West Virginia and four, including the Cincinnati Southern Railroad, which is owned by the City of Cincinnati and leased to the Southern Railway, lead directly into the heart of the South. Nearly 1200 miles of tracks provide

opened to the public in 1922 at a cost of more than \$3,600,000 and which permits all traction lines from the South to enter the heart of the business district. This edifice covers a ground area of 52,148 square feet and it is estimated that about 100,000 people utilize it daily, including about 75,000 patrons of the lines.

A rapid transit loop, belting the city and entering the center of the business section through a subway, has been under construction for several years. Already about \$7,000,000 have been expended and it is contemplated that the final cost will approximate \$18,000,000. The subway is largely completed with double track and an underground terminal.

Furthermore, it was recently announced that all differences of opinion as to building a new freight and passenger terminal system for all roads entering the city have been adjusted and a definite program adopted under which the various roads will centralize, and that plans are now being prepared which contemplate an expenditure of \$70,000,000, including a new bridge over the Ohio River.



THE UNIVERSITY OF CINCINNATI.

switching facilities within the city limits, embracing 85 freight stations and team tracks, also 28 warehouse stations with an existing storage area of about 1,200,000 square feet.

In point of passenger terminals the city is giving its interest at present to the idea of centralizing all its railroads in a great union passenger station, the present Central Union Station and the Pennsylvania Station having long been inadequate. But the traction lines are adequately provided for by the Dixie Terminal, a magnificent building which was

The building of railway terminals will have a comprehensive regard for the great activity of water borne freight. Independent of the railroad plans, a \$500,000 coal unloading station of all steel construction is being built, with some smaller projects, all designed to meet not only the immediate demands of renewed river traffic, but especially future requirements, in view of the approaching completion of the Government dams to assure a nine foot depth of water all the way from above Pittsburgh to the mouth of the Ohio.



A BUILDING DEVOTED TO THE SCIENCE OF ADVERTISING.

At the same time Government surveys, under Congressional appropriations are bringing to a finality the matter of reconstructing, under present day specifications, the old Miami & Erie Canal so as to provide a barge canal from Cincinnati to Toledo which would link the Ohio River with Lake Erie and thus give the Lakes an outlet to the Gulf of Mexico via

manufactured articles, as well as lumber, the rich agricultural crops of the West, the Middle West and also of much Southern territory, which would avoid costly hauls by rail to the sea coast.

It needs but a glance at the map to perceive the strategical advantage possessed by Cincinnati as the most northern dis-



A CINCINNATI POTTERY—THE PRODUCT IS WORLD FAMOUS.

the Ohio and Mississippi rivers. The plan also provides for a branch from Defiance, Ohio, to connect with Lake Michigan. This canal, if built, would afford advantages that can hardly be estimated, especially as it would give water rates for the freightage of coal, iron, steel, steel products and other

tributing point for the South and the most southern distributing point for the North.

Cincinnati is also great as the home of many industries of varied scope and character. Engaged here in the manufacture of office furniture, soaps, brass goods, pianos, books,

and playing cards are some of the largest establishments of their kind in America. Besides the city is among the leaders in the manufacture of machine tools, foundry products, boots and shoes, paper and paper goods, brushes, clothing, sheet metals, chemicals, wood-working machines, pottery, rolling mill products, fire proof safes and cabinets, automobile fen-

test as high as the coal coming from fields which operate through Cincinnati. The fields of West Virginia, the eastern part of Kentucky, Tennessee and Ohio, yielding the highest quality and the greatest quantities of bituminous coal, find their principal market and outlet here, not only through short, direct rail facilities, but by river as well, which con-



ONE OF CINCINNATI'S MANY HOTELS.

ders, radiators and lamps, etc. It is also conspicuous for the number and excellence of its printing and publishing houses.

Briefly it may be stated that the 3025 different manufacturing interests of the city represent an invested capital of \$850,000,000 and that they have total annual sales of \$710,000,000. About 30,000 industrial workers are employed in the metal trades alone and fourteen individuals in every hundred of the city's working population are engaged in manufacturing and mechanical production.

The great variety of the city's industries places it in a position of distinction as to banking and finance which are consequently even running and comfortable, which might not be so if the city was largely dependent upon a few industries or upon a few products for income and employment.

Commercially Cincinnati is fast becoming one of the greatest coal markets of the world, and this is coming about because the coal handled through the city is of a superior quality so that it is in demand even in regions where enormous quantities of coal are produced, which coal does not

dition affords our industries a low fuel cost. This was plainly shown a few years ago during the coal famine when, despite the closing down of industries elsewhere, those of Cincinnati continued in operation. Leading coal operators have offices and agencies here.

As to steel, the proximity of the city to Pittsburgh permits Cincinnati to obtain abundant supplies at a low freight cost. Excellent water transportation between these two cities provides for deliveries of steel independent of the railroads, although the facilities of the latter are correspondingly good. Most of the big steel companies have sales and service offices here and there are two large sheet mills.

The lumber trade at Cincinnati includes hardwoods from Kentucky, Tennessee and West Virginia, besides Alabama, Mississippi, Louisiana and Arkansas and there is also a small supply from Indiana. Yellow pine comes to the city from Georgia, Florida, Alabama, Louisiana and Texas besides some from Tennessee and Arkansas. Thus it is but natural for Cincinnati to be with its excellent freight rates

and transportation facilities one of the largest lumber markets in the country. There is furthermore, more or less consumption here of sugar pine and white pines, also fir and spruce from Pacific Coast states.

Of particular importance and value to the industrial life of the city is the fact that Cincinnati possesses a huge \$15,000,000 power plant which ranks among the finest in the world and which is delivering unlimited low cost power to manufacturing plants and other big industries, so that manufacturers who contemplate establishing themselves here have assurance of dependable power service sufficient for any conceivable demands. Power is served to industries as cheap as 3½ cents per kilowatt hour with discounts of 55 cents above the first 5000 kilowatt hours, 60 cents above the second 5000, 65 cents above the third 5000, and 70 cents beyond that. The rates above 55 cents are maintained only during the period from November to March, and a 5 per cent discount per 1000 kilowatt hours is granted. Water rates are 12 cents per 100 cubic feet.

The richness of this part of the country in limestone, road stone, alluvial clays, surface silt, builders sand and gravel, molders sand and residual soil contributes greatly to the city's industrial advancement. Mention should also be made of the advantage resulting from the industrial and domestic use of natural gas which is served by pipe lines direct from the gas fields of West Virginia, Kentucky and Ohio. The proximity of the city to the mid-continent oil fields and the supplies of petroleum and petroleum products are also of great advantage in the industrial life of this metropolis.

Labor here is highly skilled and American, 328,270 of the population being native born, a higher proportion than in almost any other large city in the country and the percentage of wage earning population is 15.2 which is very large in comparison with New York, Chicago, Boston, Baltimore, St. Louis, Pittsburgh and some other large cities.

Financially Cincinnati is of high rank as a strong center. It has thirty-seven banks with an aggregate capital and surplus of \$44,000,000 and aggregate resources of about \$300,000,000. During the last ten years the deposits have increased about \$130,000,000 and in the same time bank clearings have increased about 60 per cent.

The financial attitude of the city has always been one of ease and conservatism, due to the fact that practically 3000

diversified industries afford a wholesome and non-speculative character of business. It has been free from financial storms and whirlwinds and its citizens are recognized far and wide as conservative investors. Thus it is that our annual absorption of large bond offerings from the South has brought us into close touch and co-operation with Southern business and Southern people. This conservative disposition concerning investments is also evident in the fact that practically 30 per cent of the families living in Cincinnati own their own homes, or an average of about one family in three. Many of these dwellings are suburban, for the peculiar topography of the city influenced the laying out of an extraordinary number of beautiful private grounds around houses in the outlying region, so that hills and valleys are dotted with cottages and bungalows of handsome and varied designs. All of these enjoy the advantages of thorough drainage and pure drinking water.

In this connection it is important to observe that the superior quality of the product of the Cincinnati Water Works and the excellence of the distribution system are so generally recognized that they are subjects of study on behalf of distant cities when they are seeking to improve their water supplies. An expenditure of \$11,000,000 was made to complete a modern system of pumping, clarifying and storing an abundance of soft, palatable water and the filtration and pumping system is one of the finest in the world. The volume of water assured is 128,000,000 gallons per day with pressure varying from 40 to 170 pounds per square inch. The system derives all of its needed revenue from the sale of water.

The general health and attractiveness of the city are also cared for by laws to control and keep down the amount of smoke emanating from all establishments and by sanitary laws and regulations. These coupled with an equable climate having moderate extremes of heat and cold make Cincinnati attractive as a place of residence.

Educationally the city has high rank and it is possible for a pupil of the public schools to begin his seventh year with a definite plan to complete his education right at home whether in college, university or engineering school. There are also medical and dental schools, business colleges, etc. Among the parochial schools, of which there are 56 of the Catholic denomination with enrollment of about 18,000 pupils there are four high schools, a college, a theological seminary, a law school, school of commerce, accounting and sociology



ONE OF THE MANY SOAP FACTORIES OF CINCINNATI.

and nine academies and a college for girls, this is a total Catholic population of some 100,000. Then there is the Ohio Mechanics Institute, the Hebrew Union College, a Colored Industrial School, the Eclectic Medical School and the Ohio College of Dental Surgery, the Lane Theological Seminary, the Conservatory of Music and the College of Music besides sundry private schools of prominence.

The University of Cincinnati tops the city's educational system and affords a means for students who are unable

is made to residents. These other colleges are respectively for the study of law, medicine, nursing and health, engineering and commerce, besides the graduates school. The College of Law succeeded the old Cincinnati Law School, of which Chief Justice Taft and other notable men are graduates.

In the general educational system of Cincinnati there are seven high schools covering a great variety of work in both academic and technical courses, but the elementary schools have correspondingly high standards and include manual



MAIN LOBBY—THE FIFTH-THIRD NATIONAL BANK OF CINCINNATI.

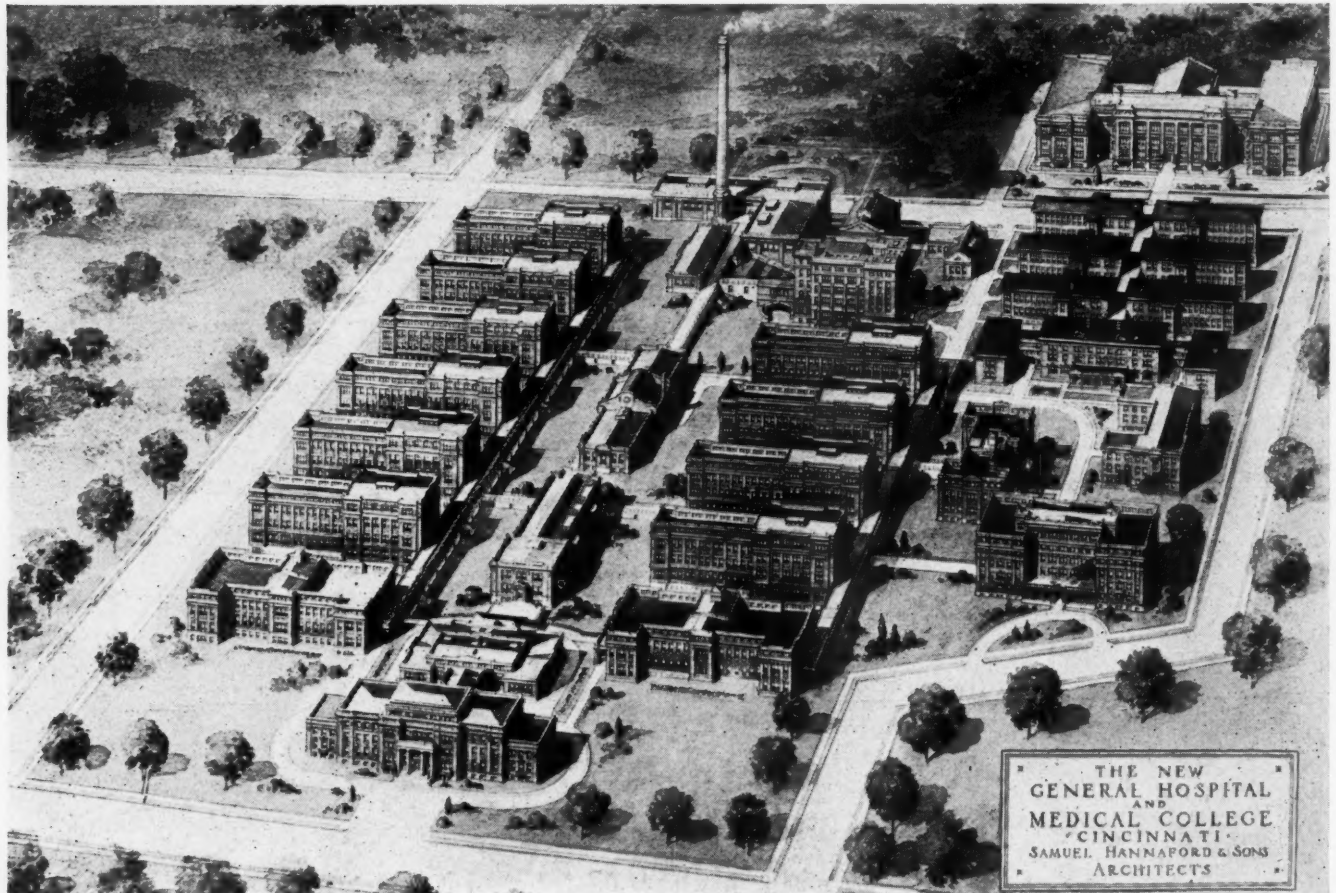
to leave the city to continue their educational course to completion. From a nucleus of one college—the College of Liberal Arts—the University has grown until it now contains six fully equipped colleges with an enrollment of more than 4500 students and a faculty of 370 members. As to its growth during the last ten years it is unexcelled. Tuition is free to residents of the city in the College of Liberal Arts and in the College for Teachers. In the others a reduction

training, domestic science, music, art, physical training, etc.

In the realm of music Cincinnati has for the greater part of a century stood high. As far back as 1834 the city was distinguished as a music and art center and the music loving people of the country are familiar with the Cincinnati Symphony Orchestra and the May Music Festivals. These latter are conspicuous, of superb beauty and matchless perfection as well as of glorious achievement. Some of the most

eminent solo artists of the world are engaged for them and augment a trained chorus of 400 voices. An immense chorus of children from the public schools is a conspicuous feature and in the festival each year more than 1200 persons participate. The festival is held in the Cincinnati Music Hall which was given to the city by Reuben R. Springer and it has one of the largest pipe organs in the world on which \$50,000 contributed publicly were recently expended for improvement. The College of Music founded in 1878 was en-

recreation features are of notable excellence. There are forty theaters including the moving picture shows. There are more than 2600 acres of municipal parks, besides the Zoological Garden which is noted, having been established in 1875 and since then maintained upon high standards. Then there is a great amusement park in the city besides another on the river several miles away. The city also ranks high in the world of sports, having been especially prominent for fifty years or more when the Cincinnati Red Stockings made their



BIRD'S EYE VIEW OF UNIVERSITY OF CINCINNATI COLLEGE OF MEDICINE AND GENERAL HOSPITAL.

dowed by Mr. Springer and others. Then there is the Conservatory of Music which co-operates with the public schools. The city is also noted for the manufacture of musical instruments ranging from those of toylike character to the largest pipe organs.

In the artistic world Cincinnati is represented by the Cincinnati Art Club, the Women's Art Club, the Arts & Crafts Club and kindred organizations including the Art Academy, which maintain the highest standards and much attention is paid to the applied arts relating to textiles, metal work, ceramics, etc. There is a large local library relating to these, and the Rookwood Pottery, among the city's industries is a conspicuous instance of the application of art in manufacture. The products of our potteries, cut glass, porcelain and kindred products are widely known. They are largely from domestic raw materials and specimens of work from the Rookwood plant are to be found in the art galleries of the two hemispheres.

Other prominent and impressive facts about Cincinnati may be summed up thus: There are fifty-three periodicals published, including four prominent daily newspapers. The Chamber of Commerce is very active and progressive in publicity work. There are more than 100 hotels, including six which are conspicuous for their service and their size. There are also a large number of clubs and their sports and

famous tour of the United States winning over every opposing club and indicating for the first time what highly organized ball playing could be developed into. The present ball park is one of the finest in America. During the racing season the city is crowded with visitors to the Latonia Track immediately across the Ohio River on the Kentucky side. Generally great encouragement is given to sports, practically all of the large banks, industries and commercial houses having football, baseball, basket ball and bowling teams. Many churches and various societies likewise devote much attention to encouraging athletic games. At Deer Park Commons there are twenty-three baseball diamonds in one great field so that an equal number of games may be played simultaneously.

The topography of Cincinnati is unique. Business and industrial sections, and the older residential sections are largely on levels, all many feet above the highest flood water marks of the Ohio River. Surrounding them are numerous beautiful hills on which are the newer residential sections. All of these sections are connected by handsome boulevards that also connect the parks, and the commanding hills are in the park system. From several of the eminences the broad panorama of the Ohio valley can be viewed in all its beauty so that everyone who sees it can have an adequate conception of the remarkable location of this great city and of why the Ohio was called "La Belle Riviere."

are
here
the
ed in
Then
er on
h in
fifty
their



pos-
or-
sent
eing
rack
side.
ally
uses
ams.
uch
Com-
reat
mul-

l in-
arge-
ater
rous
ions.
ards
are
road
auty
cep-
why

At
the
grou
tabl
Sa
low
in M
few
vary
nam
the
vent
tons
of s

It
the
men
the
it d
dent
upon
final
used
men

T
simi
refin
stat
mak
A

Paper Making From Florida Saw Grass.

A REMARKABLE ENTERPRISE, FINANCED AND MANAGED IN A REMARKABLE WAY.

By GILBERT D. LEACH, Leesburg, Fla.

After seven years of experimental and laboratory work and the construction of a plant covering above five acres of ground, the production of paper from sawgrass has been established on a commercial scale at Leesburg, Florida.

Sawgrass is a fibrous plant seemingly indigenous to shallow lakes, lagoons and marshes of Florida and a few spots in Mississippi and Louisiana. It grows in water from a few inches to four or five feet in depth and attains heights varying from three feet to ten or twelve feet. It takes its name from the serrated edges which are like saws and cut the clothing of duck hunters and trappers, the only men who venture through it. The yield varies from six tons to twenty tons or more to the acre. Florida has at least a million acres of sawgrass and it can be cut at least annually.

It was to tap this great source of paper fiber supply that the promoters of the Florida enterprise started their experiments to separate the fiber from the other constituents of the plant and make it available for paper production. That it did not yield to any known method of treatment is evident from the length of time required to perfect the process upon which the Leesburg plant is founded. The process finally evolved is to an extent similar to the soda process used in wood pulp manufacture, the same mechanical treatment being used but chemical action being different.

The result is a pulp which in its unbleached state is similar to Scandinavian kraft pulp but when bleached and refined has some of the properties of linen rag. In both states the pulp is very readily handled by standard paper making machines and the fiber is exceptionally strong.

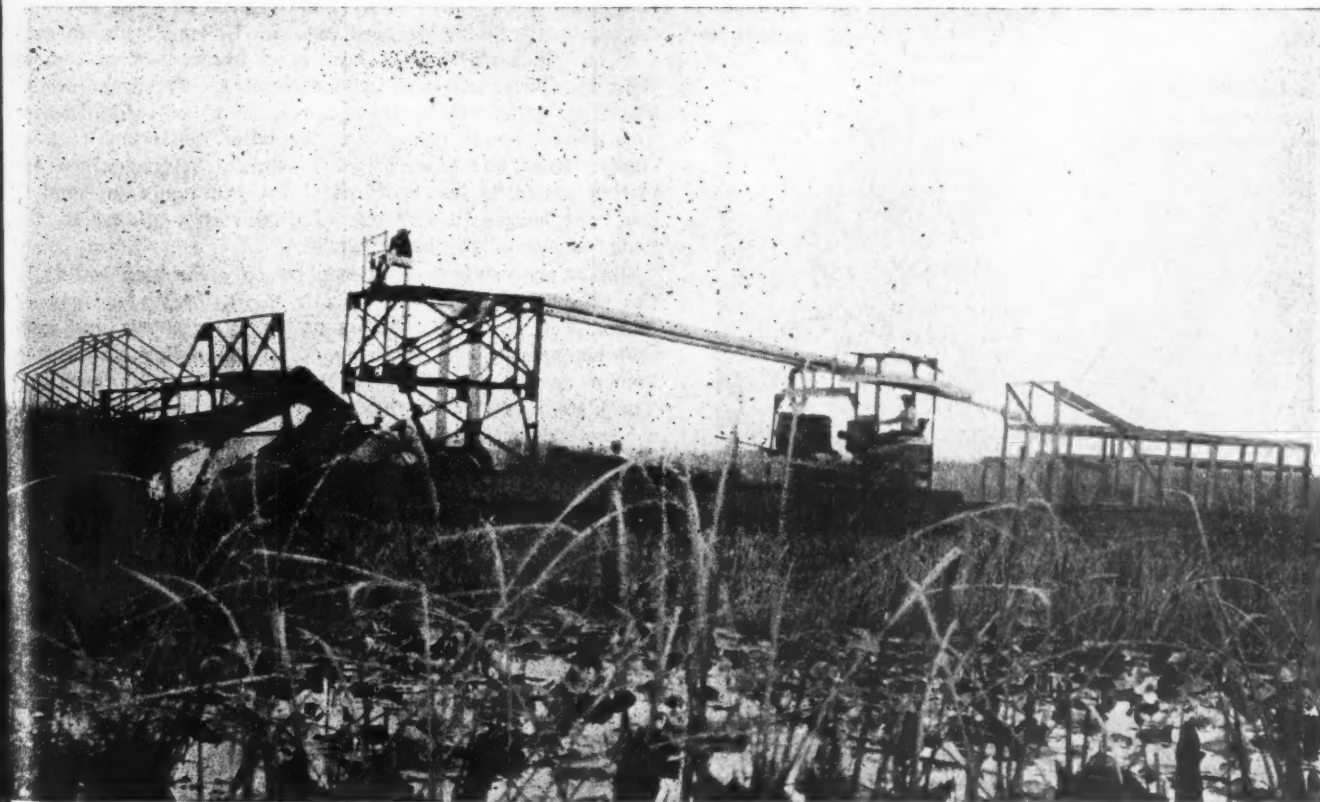
At the Leesburg plant, which is located on the shore of

Lake Griffin, a lake nine miles long by six miles wide and containing all the sawgrass necessary for the mill, the material is brought to the dock in small barges carrying six to eight tons each. Here the unloading is done by suction, a thirty-inch blower conveying it to an elevated cyclone room under which runs a travelling carrier connecting with the storage house. This house will hold 600 tons of the raw material. The same carrier, operating on a depressed track, conveys the material as needed to another point where it is taken up an incline by a similar arrangement and funnelled into the huge digester.

This digester is the largest of the revolving globe type that has ever been built, being eighteen feet in diameter and weighing 104,000 pounds empty. Twelve to thirteen tons is a load for this cooker and steam and chemicals are sprayed in through the journals as in wood pulp cookers but the interior is differently arranged to secure an action that is not in use in any other plant.

The draining, washing and agitation of the pulp are accomplished in practically the same manner as the wood pulp methods in use but the bleaching process is one of the best guarded secrets of the plant. Some of the leading bleach houses in the trade have attempted and failed in this feature of the production. The tank capacity in the draining and washing departments is 280,000 gallons. From this point the pulp is ready to go through the Jordans and to the wet machine or to the beater room if it is to be made directly into paper. The paper process is standard, the equipment consisting of a two-cylinder machine and a stack of twenty-two dryers, 112 by 48-inch, with necessary presses, calenders and rewinders.

The plant has its own power plant consisting of three Bab-



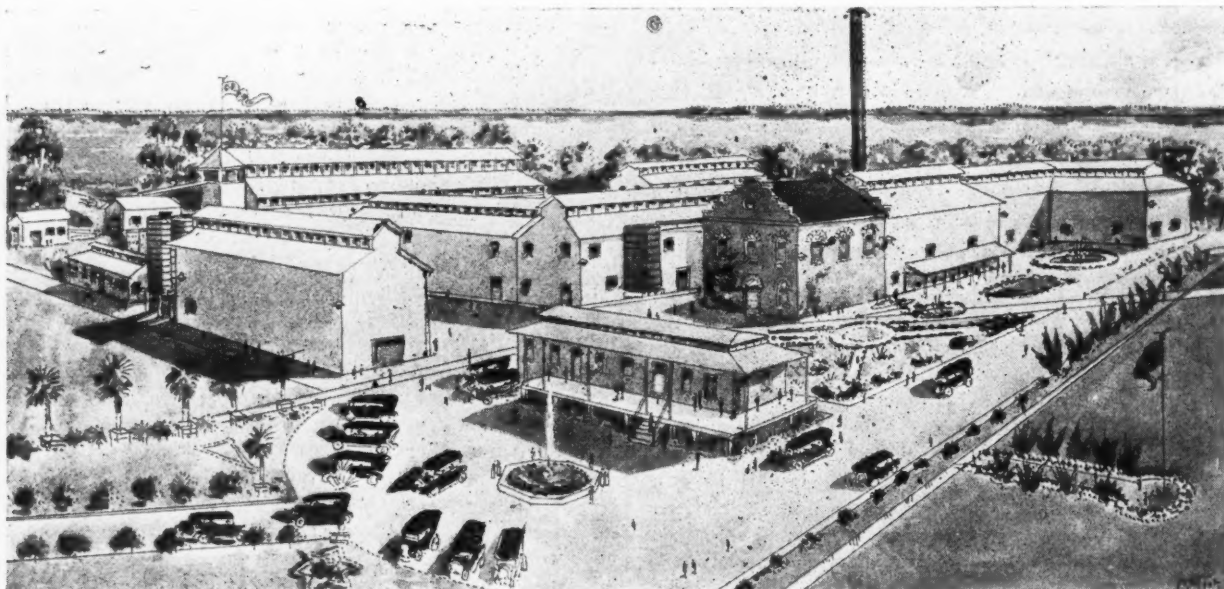
THE GIANT HARVESTING MACHINE WHICH CUTS THE SAW GRASS

cock & Wilcox boilers of 620 horsepower, Ballwood direct connected 575 h. p. steam engine, and a Westinghouse 400 kw. 440 volt electrical unit. Fuel oil is supplied from a concrete sump of 62,000 gallons capacity.

The water system consists of a filtration plant drawing its supply from the lake through a dredged canal. The

quired nearly two years to engineer and construct this amphibious monster of forty tons net weight but it was successfully launched nearly a year ago and after a number of changes has been cutting the sawgrass for several months.

Sixty-six feet over all, this machine consists primarily of a steel barge drawing thirty-six inches of water when afloat.



VIEW OF THE PLANT BUILDINGS

present pumping capacity is 2,500,000 gallons daily, but another line of centrifugal pumps is provided to double the capacity. Two elevated tanks handle the ordinary needs of the plant but pressure for direct supply in case of fire is provided.

Fourteen buildings comprise the complete plant, the holdings of the company including thirty-two acres of plant site and having a half mile of railroad track on its own property. Two tug boats, the big harvesting machine, several smaller boats and a fleet of nearly a dozen flat bottom barges, to-



SAW GRASS

gether with a floating house for the accommodation of the crew of the harvester, make up the equipment on the lake.

This harvester is one of the most interesting as well as intricate features of the production of sawgrass paper. It re-

This is mounted on tractor runs which come into action in swamp or on land, enabling the big machine to operate under any conditions. In front is a sixteen-foot mower blade, and an apron similar to those in use on wheat binders but made of wooden slats instead of canvas. This carries the harvested grass as it is knocked upon it by a large steel reel, to squeeze rolls which, in turn, feed it to choppers. After being chopped into lengths varying from one to two inches, it is taken up by twin blowers and driven into the flat bottomed, V-type barge dragged astern. Under favorable conditions this machine will harvest a barge load of six to eight tons in eighteen to twenty minutes. Two gasoline engines, one a Wisconsin eighty horse, the other a Continental fifty horse, furnish the power. A smaller tender built along similar lines but having two Fordson tractor engines for motive power, is just now completed and ready to "snake" the light barges in and out of deep water, adding to the hour-tonnage of the harvester.

Out of the original experimenters only one man is left in the present corporation. This is E. R. Lacy, formerly of Mount Vernon, N. Y. He is now vice president and general manager of the company, a million dollar corporation known as the Grass Fibre Pulp and Paper Corporation. The history of this organization is almost unique. Not until the methods and processes were found and proved out was a stock company formed, Mr. Lacy and one or more associates after another working on them and spending their own money in the work. Finally the present company was formed and for all the expenditure and work only 30 per cent of the capital was retained and even of this one-third was given back for promotion expenses.

As a result of this unique promotion the company has built the mill at Leesburg, costing around \$600,000, has control of over 600,000 acres of sawgrass, owns outright patents with twenty-eight basic claims on processes, does not owe any money whatever, has no bonds against it, and has its complete plant and equipment fully paid for and even the insurance paid up on it, and has cash in hand to carry on through the first stages of production. Officers and directors have served so far without pay, either in stock or cash.

Son
into a
\$1.00
under
thing
bined
and w
though
good
stituti
In r
saving
in the
by the
the fa
and tr
their c
subst
ments
One
keeps
account
insuran
thousan
Inste
variabl
that w
must b
the loc
agree w
our pro
day aft
we are
conveni
Items w
for just
do not
which v
more de
We a

President Stone on the Co-operative National Bank of the Brotherhood of Locomotive Engineers.

[A leading Western banker recently wrote to the Manufacturers Record and asked if we had noticed that three large banks in Cleveland with many branches had inaugurated a policy which calls for "a service charge of \$1.00 a month on all checking accounts of under \$100.00 per month." And referring to his own bank he added "We encourage thrift by having over 1500 accounts that are a direct liability to us instead of an asset as to profits." He asked if the action of the Cleveland banks in making this service charge was philanthropic for the benefit of the people at large or "is it the same old story of more pork for us."

Knowing something of the rapid development of the Cleveland bank of the Brotherhood of Locomotive Engineers, the Manufacturers Record asked President Warren S. Stone of that bank, if his bank had joined in this service charge and in connection therewith stated that we would be glad to receive from him his views on the subject for publication. In this letter to Mr. Stone it was suggested that the Manufacturers Record hoped that his banking system would be so wisely guided that it would prove a great financial success and stimulate the working people of the country at large to the development of banking interests, for out of such a development we believed that good would come to the entire country. In reply to that letter we have an illuminating statement from President Stone as to the operations of the Cooperative National Bank of Cleveland, established by the Brotherhood of Locomotive Engineers and the plans of the engineers for the development of similar banks in other cities. In many respects the operation of these banks is a complete change from many of the policies pursued by the banking interests generally although there are some banks here and there so wisely managed that they are doing, in some respects the same line of work as these Brotherhood banks. The outline of the operations of that bank as given by Mr. Stone opens up a very wide field for discussion. That these banks are destined to have great influence can no longer be questioned. Their success should be desired by every well-wisher of the country. Any failure on their part to maintain the principles on which they are based would be unfortunate for the country. The policy of good-will which these banks are seeking to develop is a policy which in part at least must be followed by the banking interests of the entire country, if they would change the present spirit of criticism against financial interests generally into a spirit of friendly co-operation.—Editor Manufacturers Record.]

By WARREN S. STONE, President, Brotherhood of Locomotive Engineers.

Some months ago the leading banks of Cleveland entered into an agreement and decided to put a service charge of \$1.00 per month on the public for all checking accounts under \$100. We did not join in this movement or have anything to do with it. Aside from the fact that such a combined movement was against the law, we felt it was unwise and would prove a boomerang. It has turned out just as we thought it would, and as a result, we secured thousands of good people for depositors who are now boosting our institution.

In many instances, these new customers brought us large savings accounts, this fact having evidently been overlooked in the formulating of the plans to put on the service charge by those who originated it, they seemingly losing sight of the fact that while many of these young people are saving and trying to lay up money for insurance or for a home, their checking account is low, but at the same time they have substantial sums tucked away in other important departments of the bank.

One illustration: A young man who is working on a salary keeps a checking account of about \$50 only. Against this account he issues one check per month to pay for his father's insurance in a distant city. At the same time he has several thousand dollars in a savings account.

Instead of joining with the others, our decisions have invariably been on the side of the people. Due to the fact that we are a national bank, it naturally follows that we must be a member of the Federal Reserve. We did not join the local Clearing House Association because we do not agree with their policy. For one thing, we give a portion of our profits to our depositors, and we keep open on Saturday afternoon to accommodate the workers. The fact that we are not a member of the Clearing House does not inconvenience us in the least. We simply deposit our daily items with the Federal Reserve Bank, and they are cared for just as promptly. The only regret we have is that we do not have the closer association with our fellow bankers which would give us daily opportunity of instilling a little more democracy into their views.

We are engaged in the huge task of bringing capital and

labor to a better understanding of each other, our greatest handicap in this effort being the unjust economic rules of civilization which make it yearly more and more difficult to give the world's wonderful production a fairer distribution among its inhabitants.

The Brotherhood of Locomotive Engineers is a voluntary, mutual organization of some ninety thousand locomotive engineers, with their international headquarters in Cleveland. After years of trying to solve the problem of making the wage go farther in the purchase of daily necessities, and after organizing a number of co-operative stores in order to bring the producer and consumer closer together, and seeing them fail (not because the principle was not right, but for the want of trained men and women for managerial positions) the thought occurred to us that perhaps we were working at the wrong end of the problem.

The late Pierpont Morgan, some few years prior to his death, is reported to have said before a Senate Committee: "Gentlemen, I care not who nor what party makes your laws, so long as I control your finances." Therefore, I took up the study of co-operative banking. I found in Europe over thirty thousand of these co-operative or people's banks. These banks had a record of over seventy years of operation by peasants, many of whom could not read nor write, yet their losses were practically nil, so we decided to put in a co-operative bank in the United States, and made application and secured a charter for the first co-operative national bank in the United States of America.

The Brotherhood of Locomotive Engineers Co-Operative National Bank starts out with the basic fundamental principle that it wants to be helpful, and that a bank should be operated for the benefit of its depositors instead of being exploited for a few stockholders. The dividends to the stockholders are limited never to exceed 10 per cent of their shares of stock, regardless of how much the bank may earn. It is not claimed that the Locomotive Engineers are the first to recognize the co-operative idea as applicable to business and industry of every kind, but it is claimed that they are the pioneers in making this principle work successfully through banks owned by special groups of stockholders. The

essential condition of their plan is that after giving to those who advance the cash for the establishment of such a stock-owned-bank a fair return on their money, (in this case limited to 10 per cent), the other group, known as the public, shall be reimbursed in the distribution of the net profits. Not that there shall be an immediate dividing of all the profits as soon as they are made, because the building up of a reasonable surplus under the conditions which surround us is a most wise precaution, and must naturally benefit both the stockholder and the depositor by providing a fund for possible losses and for those contingencies which are bound to attach to the leaner years of an imperfect economic system.

The Engineers hold to the idea that it is the depositors, and not the stockholders, who make a stock-owned bank, and that the latter "are simply trustees" for the people who deposit their funds with them. This is the true and logical conclusion of that principle of co-operation which binds these two groups together and really makes them one. In certain states of our Union which permit mutual savings banks, this principle has long been recognized, but sad to relate not with results as beneficial to depositors as might have been. A little less investment in ornate buildings and a consequent larger distribution to patrons, who are the rightful owners of the huge "surplus-accounts" shown by many large savings institutions of our country, would have the effect of helping circulation to the great benefit of all the people. Not that a big surplus is undesirable, but there is such a thing as "Towers of Babel" in all matters connected with human effort, and an unnecessarily large surplus is one of these towers.

A greater distribution than at present allowed would not suit the financial interests now in control of these savings banks of the masses, and so the latter have to be content with a 3 per cent, or possibly 4 per cent or 4 1-4 per cent dividend, while the stockholders of these banks owned by these financial barons, cut their own melons periodically, to the extent of anywhere from 20 per cent to 150 per cent. Is this fair to the hundred or more millions of American people who own no stocks in banks, but who nevertheless are the lifeblood and sinew of these public service institutions? The Brotherhood of Locomotive Engineers is going to try to help answer this question by the establishment of separate and distinct stock-owned-banks throughout the length and breadth of this land. Besides the national bank at Cleveland, it already owns or controls through a majority of stock banks in Minneapolis, Minn.; Hammond, Ind.; Birmingham, Ala., etc., all separate and distinct local institutions, which are required to confine their services to their own immediate communities and in a thoroughly constructive way. The condition endorsed on the face of the stock certificates of these banks, and other similar ones in process of organization, is that not more than 10 per cent profits shall be distributed to the stockholders.

It is anticipated without a doubt that the favorable results secured already through past experience will be obtained at every new point. As the result of that policy in Cleveland, the Brotherhood of Locomotive Engineers Co-Operative National Bank has paid to its savings depositors in addition to the 4 per cent compounded quarterly, a special dividend of 1 per cent per annum. This is a little better than 5 per cent a year. The total resources of the Cleveland bank today are over \$23,000,000. It is generally supposed that this is a Labor bank, and that the funds in the bank come from Organized Labor. This is a mistake. We do all branches of banking business, the same as any other national bank. Less than 14 per cent of all funds on deposit comes from Organized Labor of any kind. Our banking-by-mail averages anywhere from \$7000 to \$20,000 per day. No pyramiding is allowed between the various banks controlled by the Brotherhood of Locomotive Engineers.

They are in no sense branches, one of the other, the only way they resemble in any manner being that the same policy governs them all.

The men who manage these banks are all experienced bankers who have made good in their previous connections, but who, catching the spirit of co-operation, have cut loose from methods which seemed to them unfair and have cast their lot in with the "Brotherhood" for all time to come. These men are not only engaged in conducting a conservative and progressive banking business, but are also required to train men who can be sent out into the new localities which are being gradually covered by the Brotherhood of Locomotive Engineers' expansion plans. Other "Brotherhoods," such as the Railroad Telegraphers, with headquarters in St. Louis, and not financially connected with the Engineers in Cleveland, are establishing banks and trust companies on similar lines. They opened their bank in St. Louis in July, with over \$2,000,000 deposited the first day, showing that the general public there was ripe for the idea.

The Brotherhood of Locomotive Engineers Co-Operative National Bank recognizes that their banks must at all times remain liquid, and must not, under any circumstances speculate in stocks and bonds. It is the general supposition, due to the propaganda carried on before the public, that the Brotherhood of Locomotive Engineers Co-Operative National Bank was organized to create a strike fund. Nothing is further from the facts. Two thoughts were back of the organization of the bank: First, to care for the money of the widows and orphans. The Brotherhood of Locomotive Engineers pays out each year some \$3,000,000 into the homes of deceased or disabled members. This goes into the hands of women and children who are not experienced in business affairs, and they are the prey of every get-rich-quick scheme that comes along. It was to conserve their money, and to inculcate the habit of systematic saving and thrift, and enable the workers to accumulate a sum for a rainy day, that the bank was formed.

Everyone is made welcome at the bank, regardless of whether they want to transact business or not. Twenty-eight languages are spoken, so that the foreigner who comes to our shores finds someone who is in sympathy with him and who can speak his language, and advise him as to the many problems that confront him, and especially instruct him as to how he can send money to those he has left behind. It means so much to these people who are strangers in a strange land. This country calls itself the "melting pot" of the nations. The truth of the matter is it neither melts nor assimilates—it simply exploits the foreigner and then forgets about him. We are trying to help them solve their problems by giving them advice in their own language.

The bank stands for service. We do but little advertising. We have a Service Department. If you wish to attend a theatre, or have a theatre party, you do not have to stand in line for an hour to get your tickets. If you are a customer of our bank, simply call the Service Department, tell them what you want, and the tickets will be waiting for you at the box office, or they will be sent by messenger to your home address. If you want a railroad ticket and reservation, or a steamship ticket and reservation, all you have to do is notify the Service Department. It will be taken care of for you. If you are away from home, and, possibly, your wife and children are going on a journey, upon request a messenger will be sent to your house to look after tickets and baggage and help her to the train. No charge is made for this service, and we have found it the best advertising feature ever put into effect, as well as making friends for the bank who remain with us for all time.

Articles of incorporation have been filed at Mobile, Ala. for the Bowling-Blacksher Cotton Co., with H. C. Bowling, O. W. Elliott and J. U. Blacksher as incorporators.

The False Propaganda Put Out by Union Mining Interests as to West Virginia Non-Union Mines.

Charleston, W. Va., August 25.—[Special]—In view of the impending anthracite strike, the arbitrary attitude assumed by the United Mine Workers organization and the propaganda leading to the ultimatum issued by John L. Lewis, president of the mine workers that he would give the operators the worst whipping they had ever had, it seems pertinent to call attention to the fact that Lewis and those associated with him are past masters in disseminating propaganda favorable to their cause, all of which only beclouds the issues between miners and operators, and to point out just what was back of the report recently submitted to the United States Coal Commission by Winthrop D. Lane and others.

It was charged in that report that employees of many coal mining companies in Pennsylvania, West Virginia and Alabama were held in a state of virtual isolation. If such a report were true it would constitute a very serious indictment of the operators, but it is false and such a report coming from prejudiced investigators is worthless as throwing any light on the differences existing between operators and miners. As a matter of fact the report, in so far as some of those signing it are concerned comes from those who it is believed constitute a part of the auxiliary propaganda organizations of the United Mine Workers.

Before the advent of the United Mine Workers organization in some of the fields of southern West Virginia the relationship between most operators and their employees was one of friendship. The average operator knew all or nearly all of his employees by their first names and knew all the members of their families, and knowing the value of the personal touch between employers and employees, operators as a rule have sought to encourage close relationship with their men and their families. The policy of the United Mine Workers has been in so far as possible to stamp out such friendship and to foster in its place a feeling of distrust, hatred and suspicion in order to strengthen the hold of the union on the men. In other words the strength of the miners union has been built up on hatred rather than on friendly relations between employers and employees, and that in a large measure has been responsible for much of the trouble which has occurred in the southern part of the state.

It has been the policy, in recent years at least, for the operators to seek to provide every means to make their employees happy and contented and healthy. Club houses and Y. M. C. A.'s and many other means of recreation have been provided. Prizes have been offered for the best gardens and the best kept premises. Streets have been paved. Low rents have been and are charged. It is seldom that a miner pays more than \$8 a month for the house in which he lives. Several companies in the Logan field even have their own dairy herds and their own banks in which the employees are interested.

A few years ago the vice-president of the largest producing company in southern West Virginia defrayed out of his own pocket the expense of a free dental clinic for the children of employees so that the children might grow up to be healthy men and women, continuing to defray the expense until the idea took such hold throughout McDowell county that eventually the legislature passed a law authorizing the county as a whole, through a special levy, to support a county-wide dental clinic.

There is no isolation or virtual isolation in any of the fields of southern West Virginia. Miners are free to come and go as they please. As a matter of fact the operators endeavor to make the surroundings of miners just as attractive as possible in order to hold the miners and that is the only means resorted to in order to hold them and maintain

organizations. But the propaganda of the United Mine Workers and of the Lanes and others never touches upon such conditions, never even reaches the surface. There has never yet been an impartial investigation of conditions as they really exist among the open-shop mines of southern West Virginia or even among the mines where the union still maintains its hold, for there too an effort is made to have happy and contented employees.

Whatever may be said about the earnings of miners, they are large when the miner so wills it, running as high as \$4000 and \$5000 a year, when the miner is willing to work. Earnings are that high in the Logan field and in other open-shop sections in the state. Earnings depend not so much upon the rate of pay as upon the willingness of the miner to work and if earnings are limited in many cases it is because so many miners, as their wages are advanced, reduce their working time. In other words there are many miners who since they are able to earn in one day what formerly required two or three days, have reduced their labor proportionately.

Completing Plans for Convention and Road Show of American Road Builders' Association.

Plans for the 1924 Convention and road show of the American Road Builders' Association have practically all been completed. These two events are to be held simultaneously in Chicago, the week beginning January 14. The convention headquarters are to be in the Congress Hotel. The road show will be held in the Coliseum and the adjoining Greer Building.

Frank Page, president of the American Road Builders' Association, has appointed Chas. M. Upham manager of the convention and road show. Mr. Upham will report directly to the executive committee of the American Road Builders' Association. With the approval of that committee, Mr. Upham will appoint several committees to handle various features of the two big events of the year in the highway industry.

Work is being pushed on the whole program in such manner as to give ample time for all concerned to make their plans.

Mr. Upham will open an office in Chicago well in advance of the date of the convention and road show. Meanwhile, arrangements are being made so the date of drawings for space in the road show may be announced shortly. General features of the convention also have already been mapped out to an extent that will permit the details to be determined before the end of September.

All inquiries regarding the convention and road show should be addressed to the home office of the American Road Builders' Association at 37 West 39th Street, New York City, until the announcement of the location of the temporary Chicago office has been made.

Buys \$2,000,000 Pigment Plant at St. Louis.

St. Louis, Mo.—At a price said to be approximately \$2,000,000, the National Lead Co. of New York has purchased the National Pigments & Chemical Co. of this city, the purchase being made to assure the Titanium Pigment Co., a subsidiary of the National Lead Co., a plentiful supply of barytes for use in the manufacture of Titanox a paint pigment.

The National Pigments & Chemical Co. controls large baryte deposits in Washington County, Missouri, and has a plant in this city. The company was organized about two and a half years ago and has a capital stock of \$1,350,000. It is expected that the National Lead Co. will continue the operation of the St. Louis company in mining baryte and in the production of barytes, the refined product. Titanox, which is produced by the Titanium Pigment Co. is said to be composed of about 75 per cent of barytes and 25 per cent of titanium.

Water Shipment of Six Tanks from Old Hickory Plant to St. Louis.

Jacksonville, Tenn., Aug. 24.—A novel shipment by water was recently made from the Old Hickory Powder Plant here to St. Louis. Six immense tanks already erected at the Old Hickory Plant were purchased by the Monsanto Chemical Works for their Plant B in East St. Louis. As these tanks are of a diameter of twenty feet and a height of twelve feet, and weigh approximately thirteen tons each, their size made it impractical to ship them by rail. It would



SHIPPING THE SIX TANKS BY BARGE

first have been necessary to dismantle them and later reassemble them in their new location, incurring unnecessary expense. It was possible, however, to ship them by barge without dismantling them.

The tanks which were a part of the equipment of the gigantic Old Hickory Powder Plant, a war-time measure, rested upon a twenty-foot platform, and were lowered upon railway flat cars by means of two locomotive cranes. The flat cars were hauled to a concrete road which transverses the plant and were there transferred to low wagons, which were hauled down the concrete road to the river edge by caterpillar tractors. The distance from the original location of the tanks to the river is one and a half miles and was covered six times without mishap.

From the loading point the barge descended the Cumberland River through a series of locks to the Ohio, thence down the Ohio to the Mississippi, which it ascended to St. Louis, where the tanks were unloaded and installed in their new locations.

Plan to Develop 9300 Acres at Hanging Rock—Will Build Hotel and Other Facilities.

Plans are being worked out by D. D. Smith of Winston-Salem, N. C. for the development of 9300 acres of land known as Hanging Rock, about 25 miles from Winston-Salem, the development to include the erection of a hotel, construction of automobile road, golf course and other facilities. Mr. Smith writes the MANUFACTURERS RECORD:

"I have had E. S. Draper of Charlotte, N. C. make surveys and plans for the development of 9300 acres, known as Hanging Rock, which has an altitude 2672 feet, according to government records, and is twenty-five miles distant from Winston-Salem. I am now having an automobile road built to the crest of the mountain.

"Mr. Draper is to present the plans for the development, which calls for the erection of a five story hotel on top of the mountain, the construction of a 200-acre lake on Indian Creek, and an eighteen-hole golf course, with a landing field for aeroplanes, all on top of the mountain, at an altitude of about 2200 feet. During the next thirty days I contemplate the organization of a company for the development of the program outlined."

Over 97 Per Cent of Carbon Black Produced in the South.

The quantity of carbon black produced from natural gas in the United States in 1922 amounted to 67,795,000 pounds, over 13 per cent more than in 1921, according to the Geological Survey. The production and value of carbon black, by states, in 1922 as compared with 1921 are shown in the following table, from reports of 26 producers. Montana, Oklahoma, Pennsylvania, and Wyoming are grouped together so as not to make public the output of individual companies. In 1922, as in 1921, Louisiana and West Virginia produced more than 90 per cent of the total output. Louisiana maintained first place and increased its lead over West Virginia, owing to developments in the Monroe field.

Increased demand for carbon black during the later half of the year, especially by the rubber industry for use in making tires, required practically all the product of the year and, in addition, between 12 and 15 million pounds that had been held in storage. The increased demand was reflected by a rise in spot prices, which went up to 24 cents a pound, as quoted in The Rubber Age. The reported average price realized for the year at the plants was 8.6 cents a pound.

OUTPUT AND VALUE OF CARBON BLACK PRODUCED FROM NATURAL GAS.

| State | 1921 | | 1922 | |
|------------------|-------------------|-------------|-------------------|-------------|
| | Quantity (pounds) | Value | Quantity (pounds) | Value |
| Kentucky | 2,697,075 | \$ 215,822 | 4,306,875 | \$ 416,549 |
| Louisiana | 31,003,615 | 2,949,428 | 41,966,856 | 3,564,393 |
| West Virginia .. | 25,073,000 | 2,204,400 | 20,095,481 | 1,714,576 |
| Total South .. | 58,773,690 | \$5,369,650 | 66,369,212 | \$5,695,518 |
| Other States* .. | 992,625 | 76,228 | 1,425,917 | 124,100 |
| Grand Total ... | 59,766,315 | \$5,445,878 | 67,795,129 | \$5,819,618 |

* Includes Oklahoma, Montana, Pennsylvania and Wyoming.

Kansas City Will Build \$11,000,000 Water Plant—Contracts Soon to Be Awarded.

Kansas City, Mo.—Accepting a supplementary report of Fuller & Maitland, engineers of this city, the Kansas City Water Board has authorized the engineers to proceed with the construction of the new water plant which will cost about \$11,000,000, according to the modified report, a previous report having placed the cost at \$19,877,000. Some contracts may be awarded in October. The board reserves the right to make such changes in detail as may be justified.

As outlined in the modified report, the following items and cost of construction are involved in the work: Main pressure tunnel, \$1,527,000; East Bottoms branch tunnel, \$916,000; Turkey Creek tunnel, \$990,000; pressure tunnel draining and control arrangements, \$253,000; East Bottoms pumping station and equalizing reservoir, \$1,271,000; East Bottoms station equipment, \$700,000; discharge mains, \$918,000; purification works, \$2,521,000; river protection works, \$345,000; intake and low lift pumping station and secondary pumping station, \$819,000; low lift and secondary pumping equipment, \$340,000; improvement of Turkey Creek station, \$400,000.

It is expected that five years will be required for the construction of the plant and improvements, the cost of which will be defrayed by a bond issue of \$11,000,000 already voted.

Purchases Refinery and Other Facilities—Will Install Cracking Stills.

Ranger, Tex.—The Interstate Refineries Corporation of Kansas City, Mo. has purchased the refinery here of the Ranger Pipe Line & Refining Co. on a bid of \$300,000. It is stated that new cracking stills will be installed and the refinery put in operation.

In addition to the refinery, the purchase includes a water station here and six filling stations in Kansas City, beside oil leases in Texas and Oklahoma.

BUSINESS CONDITIONS FAVORABLE IN ATLANTA DISTRICT.

Best Building Year in Atlanta's History—Millions of Dollars in New Construction Operations and in Huge Hydro-Electrical Developments.

Atlanta, Ga., August 27—[Special.]—Banking conditions in Atlanta have been very good during the past six months, and give every indication of remaining good during the fall, according to Mr. Strickland, vice-president of the Fourth National Bank.

"Atlanta," says Mr. Strickland, "is the largest distributing center in the South, and one of the main centers of distribution in the country. Fully sixty per cent of the nationally known and nationally advertised products in the United States are distributed through Atlanta to the thirteen Southern states. You can scarcely name a large manufacturing firm that does not maintain an office here.

"This acts as a steadying influence, and serves to make business conditions uniform throughout the year. While one section may be depressed, another is almost sure to be enjoying good conditions, and it is not often that the entire South suffers a depression in business as it did in 1920.

"I might say that, agriculturally speaking, the South has made a more rapid recovery from the recent depression than any section of the country. While cotton will always be the principal money crop, our farmers are rapidly learning to grow food and feed crops. More than thirty counties have now adopted the program of the Georgia Association, and are introducing the cow, the hog and the hen on every farm. And the plan is spreading every day."

As regards building, Atlanta is having the most remarkable year of its entire history.

During the first six months of 1923, building permits totalled \$17,325,337—more than double the value of permits issued during the same period last year. Not only did building permits show a big gain, but leases, mortgages and loan deeds as well. Real estate transfers amounted to \$14,000,000 more in the first six months of 1923 than during the first six months of 1922, and mortgages and loan deeds amounted to at least \$10,000,000 more than during the same period last year.

That business men have confidence in the future is shown by the great number of long-time leases taken up this year. Fifteen, twenty and thirty-year leases, some of them involving the expenditure of a million dollars and over, are becoming the rule rather than the exception.

Among the larger building enterprises being completed this year are the new Atlanta-Biltmore Hotel, involving an expense of more than \$7,000,000, thirteen new public schools, being completed at an expense of more than \$4,000,000, the Spring Street viaduct, which will cost around \$650,000 when completed, and any number of hotels and apartments costing all the way from \$500,000 to \$1,250,000 each.

In addition to this there is the new Rich Brothers department store, to cost \$1,500,000, now well under way, and six new office buildings ranging from \$500,000 to \$1,000,000.

Conservative estimates place the probable total of building permits in Atlanta for 1923 at around \$40,000,000, and Atlanta architects and contractors expect the activity to continue through the fall and well into next winter.

That the Georgia Railway and Power Company is convinced that the period of business depression is over, and is looking for the rapid development of industry in the near future is shown by the fact that it is spending more than \$6,500,000 this year on improvements in its power and transit service.

The program, which is going steadily forward, includes the construction of a new power plant, to be known as the Mathis-Tallulah plant, at the head of Tallulah lake, with a

capacity of 22,000 horse power; completion of the Tugalo plant, at the junction of the Tallulah and Chattooga rivers, with a capacity of 88,000 horse power, and the modernization of several smaller plants and sub-stations.

In addition to this, the power company is running a new high-tension transmission line to Atlanta at a cost of approximately \$750,000, making a total of three 110-volt lines entering Atlanta and increasing her power by a third.

Of the \$6,500,000 being spent by the power company, about \$3,000,000 will be spent in improving the service to Atlanta. Officials of the company are expecting increased business this fall and winter, as well as increased business for the city and for north Georgia for years to come, and are making preparations for it.

Taken as a whole, business has been running steady in Atlanta during the summer, and is looking up this fall and winter.

With farmers in good condition, cotton mill men operating at full capacity, and merchants and distributors all over the city preparing for better business this fall, things look more hopeful than they have in some years.

And while the South is not yet out of the woods, so to speak, it can begin to see daylight through the trees. There are indications which point toward a return to normal conditions, if not this fall, at least within a few years.

Bids Received for Construction of \$2,000,000 Medical Group for Vanderbilt University.

Details are being worked out by Vanderbilt University at Nashville, Tenn., for the erection of a group of medical buildings for use of the University. This group will consist of three units to cost about \$2,000,000, the main building to be 458 by 337 feet, four stories and basement. There will also be a hospital building to contain 163 beds, in addition to the various hospital departments, and a four-story nurses' building which will be equipped with a sleeping porch.

With reference to construction bids, the University wires the MANUFACTURERS RECORD:

"Bids upon medical group were received August 16 from the following firms: General contract, G. B. Howard & Co., Nashville, Tenn.; Foster & Creighton, Nashville; Rock City Construction Co., Nashville; Gould Contracting Co., Nashville; L. P. Soule & Sons Co., Boston, Mass.; Hegeman-Harris Co., New York City; George A. Fuller Co., New York. Electrical work, Herrick & Lawrence, Nashville; Hixon Electric Co., Boston, Mass.; Sanborn Electric Co., Indianapolis, Ind. Heating and ventilating work, State Heating & Ventilating Co., Memphis, Tenn.; Buerkel & Co., Boston, Mass.; William A. Pope, Chicago, Ill. Plumbing work, Kennedy & Co., Nashville, Tenn.; William Hillenbrand Co., Cincinnati, Ohio; James A. Cotter Co., Boston. We are not ready to give out any information in regard to the amount of the bids; Coolidge & Shattuck, Boston, Mass., are the architects."

Plan \$500,000 Paper Plant Near Jacksonville.

Jacksonville, Fla.—Negotiations are being carried on by the Leesburg Fibre Pulp & Paper Co. of Leesburg, Fla. for the establishment of a \$500,000 paper plant at South Jacksonville. Two sites are being investigated, both adjacent to the Merrill-Stevens shipbuilding plant on the river. The main building will be 300 by 50 feet and will house the paper making machinery. There will also be other smaller buildings.

Paper will be manufactured from fibre pulp produced at the company's Leesburg plant and will consist of several grades. Gilbert D. Leach is the secretary-treasurer of the Leesburg Fibre Pulp & Paper Co. and E. R. Lacy is the general manager.

WILL BUILD BIG ADDITION TO HURT BUILDING.

Two 17-Story Wings to Cost More Than \$1,000,000—Five Floors of Completed Structure to Be Leased to Southern Bell Telephone & Telegraph Company at Rental of \$2,085,500 for 15-Year Period.

Plans are being developed by the Atlanta Realty Corporation, of which Joel Hurt is president, for a big enlargement of the Hurt Building here which will embrace the addition of two 17-story wings to cost more than \$1,000,000 and which will make the building one of the largest office buildings in the South. Construction details are being handled by the George F. Hurt Engineering Corporation of New York, which wires the MANUFACTURERS RECORD:

"At present the telephone company maintains offices in the Brown Building on Marietta street, while its greatest unit of office space is in the Central Building at Pryor and Alabama streets, all of which it occupies except the ground floor. Space in the main exchange building is also used for offices and in the old city hall building. It is the intention of the company to centralize its various departments in one building. The transaction covering the lease of the telephone company was handled by the L. W. Rogers Realty & Trust Co. of this city.

"Hurt building extension is merely completion of structure originally projected. Construction now will cost over \$1,000,000 and will be of same character as present building and will cover 20,000 square foot lot, 17 stories and basement and above lower stories will consist of two important wings along Edgewood avenue and Exchange place, respectively, with large V-shaped court between. Completed building will be one composite structure served by thirteen elevators and all facilities unified. We, with Hugh Tallant, of New York, will handle architectural work and the Realty Construction Co., of this address, will be the contractors."

Upon completion, it is said five floors of the enlarged building will be leased to the Southern Bell Telephone & Telegraph Co., at a total of \$2,085,500 for a 15-year rental period.

To Erect \$250,000 Graphite Plant at Chattanooga.

Announcement has been made that the Dixie Consolidated Graphite Co. of Birmingham, will erect a plant at Chattanooga for the purpose of manufacturing flake graphite into finished products. With reference to the proposed plant, the company wires the MANUFACTURERS RECORD:

"Full details not yet worked out; capitalization \$1,500,000, being \$1,000,000 common and \$500,000 preferred; capacity approximately 15,000 pounds daily; building and equipment about \$250,000."

It is stated that the company owns one of the finest graphite deposits in the United States, located in Clay County, Alabama, in the Ashland district. The property consists of 1300 acres and the mine is within 150 miles of Chattanooga. A building at the mine for extracting graphite from the rock formation, which was burned several weeks ago, will be rebuilt at once.

West Virginia Will Build Governor's Mansion.

Charleston, W. Va., August 25—[Special.]—The State of West Virginia will build a governor's mansion here at a cost of over \$100,000, construction bids for which will probably be opened within five weeks. The building will be two stories and basement, 110 by 72 feet, of brick and hollow tile with marble trim. It will have a slate roof, oak and tile floors, metal ceilings, and will be equipped with a \$10,000 vapor system of steam heat and a \$2000 electric conduit system. Walter F. Martens of Charleston is the architect.

Non-Union Southern Miners May Again Save the Nation.

Charleston, W. Va., August 25—[Special.]—Inasmuch as a strike of anthracite coal miners would be futile in so far as the United Mine Workers of America are concerned, if there should continue to be production in bituminous mining sections, there are many conversant with conditions in the coal industry who entertain the opinion that a sympathetic strike will be called in such bituminous fields as are under union dominion, with a view to forcing the country as a whole and the anthracite operators to yield to union demands.

If a sympathetic strike should be called, it will be possible for the non-union mines of three states to produce anywhere from 3,000,000 to 4,000,000 tons of coal a week as their quota toward supplying the deficiency created by an anthracite strike. Just as the non-union or open shop mines of southern West Virginia, Virginia and Kentucky prevented the country, from being frozen into submission to the demands of the United Mine Workers in 1919 and just as the same regions made it possible to offset the losses sustained by the strike or 1922, so the same mines will become an important factor in supplying coal for domestic and industrial needs at the present time, if there should be a suspension of anthracite production or a suspension of both anthracite production and bituminous production in such states as are dominated by the United Mine Workers organization.

In the event of a strike in all organized coal producing districts it would be possible for the four smokeless regions of West Virginia to produce at the maximum about 1,150,000 tons of coal, if adequate transportation facilities were provided. Smokeless, as it is known, is a semi-anthracite coal. The Pocahontas field has a potential capacity of between 440,000 and 500,000 tons a week, the Tug River field a potential capacity of about 150,000 tons a week, the Winding Gulf field a potential capacity of about 230,000 tons a week and the New River field about 400,000 tons a week.

Inasmuch as mines in the Upper Potomac, Georges Creek, Elkins, Somerset, Connellsville and adjoining fields are not organized it would be possible to produce, if necessary, in those districts, between 200,000 and 250,000 tons a week. Under favorable transportation conditions mines in Northeast Kentucky could produce in excess of 300,000 tons a week but there are other fields also in Kentucky, not under union domination which would swell the total tonnage to be relied upon in that state. It will be possible to rely on approximately 1,350,000 tons of high volatile coal from southern West Virginia mines, should a general strike be called. Car allotment discloses the fact that the Logan field alone would be able to produce 500,000 tons per week, under favorable transportation conditions and that the Kanawha and Coal River districts could produce 550,000 tons to which should be added the 300,000 tons potential capacity of the Kenova-Thacker district on the Norfolk & Western Railway.

Atlanta's \$450,000 Senior High School for Girls—Bids to Be Opened September 7.

Atlanta, Ga., August 25—[Special.]—The city board of education will open construction bids September 7 on the proposed \$450,000 senior high school for girls to be erected here. The building will be three stories and basement, of reinforced concrete and brick, with tile and tar and gravel roof, concrete and oak floors, metal doors, vaults, ventilators, ornamental terra cotta, steel sash and trim and wire glass. Of the total cost of the building, about \$100,000 will be expended for plumbing, heating and wiring.

Edwards & Sayward are the architects; Lockwood, Greene & Co., associate architects, and A. Ten Eyck Brown, supervising architect, all of Atlanta.

NEWS AND VIEWS FROM OUR READERS

[Publication in this department of letters from our readers does not mean that we either approve or disapprove the views expressed. We believe in a full and frank discussion of the mighty questions of the hour, for only in this way can the truth be found. Therefore we often publish letters with which we do not agree.—Editor Manufacturers Record.]

Leave It to France.

C. M. MALLET, President Mallett-Brown Company, Frostproof, Fla.

Mr. Gould's article, "Why Not Trust France?," in your issue of August 23, is so in accord of my views on the subject that I cannot refrain from writing a word of appreciation. I have been expecting something like this to appear in the RECORD and I congratulate you for taking this stand on the side of right, as usual.

Has the world forgotten how Germany boosted up her people during the war by telling them of all the loot that would be theirs when the war was won? If anybody thinks Germany was "kidding" then, they don't know Germany.

France, in her present policy, is speaking the only language the Hun can understand and, to me, it is inconceivable why she hasn't the support of all honest nations.

Lacking that thing we call "honor," which is what keeps people, as well as nations, straight, the German has got to be made to pay and pay until he is scared to do that which is crooked. LEAVE IT TO FRANCE!

Great Britain's Mistake.

H. A. MINER, President Steel Protected Concrete Company, Philadelphia.

As a plain citizen, I want to thank your Mr. Frank Gould for his very correct and pointed explanation of the Ruhr matter.

The age old inability of the British to "see the point" is the cause of the whole trouble.

If Britain had been able to anticipate the possibilities of early July, 1914, she could have easily prevented the Great War; even so if she had encouraged France to help her collect from Germany the payments so justly due, at the time of the first occupation of the Ruhr, the matter would have been settled long ago, to the satisfaction of everybody except Germany, and I fail to see that it is possible to please Germany unless injustice be done some other country.

France is not asking too much, and anyone who would deny her is influenced by unfair motives.

There is one thing the U. S. should do, namely, to insist that everybody shall PAY THEIR HONEST DEBTS; on no other basis can any man or country hold up its head.

Community of Interest in City Building.

J. S. KUYKENDALL, Winston-Salem, N. C.

Several times during the past few months I have noticed suggestions in the MANUFACTURERS RECORD relative to the advantages many of our Southern cities have for working in a co-operative way, rather than against each other, and in the latter case killing good prospects for investment, and perhaps hindering the development of their entire section.

Pursuant to your suggestion, three cities of Winston-Salem, Greensboro and High Point, are driving ahead for one common end, and if we can jointly add prestige and development to our Triangle Group, we stand together for this purpose, if we cannot locate new industries, new educational institutions, and greater recreational advantages in our immediate territory, we will exert our combined energies to locate them as near this territory as may be practicable. If we cannot locate them to their advantage in this section of North Carolina, then we will use our best ef-

forts to secure them for some other section of our great Southern country, and thus receive the indirect benefit.

I would rather locate an industry, or a business a hundred miles distant, and see that industry or business succeed, than to locate it in our town and see it fail or see a dozen thriving small towns spring up around our city, than to add the population they would bring to the city. The burden would be distributed upon the shoulders of a dozen communities, instead of one. New life and growth would give added value to greater area, and at the same time directly benefit the business interests of the central point.

Florida's Climate and Florida's Town Schemes.

W. W. DEWHURST, St. Augustine.

Whatever uncertainty there may be as to the agricultural and horticultural outcome in this state the climate of Florida is unsurpassed.

For the last few days I have been in extreme South Florida in the wonderful Cape Sable region, the semi-tropic point of the peninsula where frost is seldom seen.

At this writing I am looking over Lake Worth at "Whitefall," the beautiful residence built by Mr. Flagler twenty years ago.

The sky is of that deep blue and the great white clouds are banked as seen only in the tropics and semi-tropics. A steady trade wind blows off the ocean, and out of the sun it is delightfully cool.

In a long life in New England, in the West and in North Florida, I have never passed a more comfortable Fourth of July.

Surely you, Mr. Edmonds, are warranted in predicting that the whole east coast of Florida will become a succession of homes for many thousands from other states.

Yet only one peculiar incubus rests on the development of the state of Florida, and that is that there is only one political party and that ruled by the primary system.

Next as a hindrance to a healthy growth is the very general practice of selling town lots.

Real estate agents who deal in country property are the exception. There is much more money in town site propositions.

A speculator taking no interest in what will build up the state, buys a tract of wild land, sets stakes for streets, does a little clearing and road making, names it a town and begins advertising.

The newspapers fail to condemn the practice and methods. Their great source of revenue is from their town-site advertisements, often whole page advertisements.

There is a legitimate field for the sale of suburban properties adjoining the cities but the practice of making townsites on all the territory within ten or twenty miles of the larger towns on the east coast of Florida is doing much harm to its proper development and should be discontinued.

The funds received from the sale of the additional stock of the Monongahela West Penn Public Service Co. of Fairmont, W. Va., in connection with its increase of capital from \$20,000,000 to \$30,000,000 will be used principally for new construction. This will consist largely of improvements and extensions to the transmission and distribution system.

THE IRON AND STEEL SITUATION

Improved Tone in Iron and Steel Market.

Pittsburgh, Pa., August 27—[Special.]—The midsummer pig iron statistics, officially reported by the American Iron and Steel Institute, show production, including spiegeleisen and ferromanganese as well as charcoal pig iron, at 21,016,475 gross tons, or at the rate of about 42,000,000 tons a year. Production was at its highest point in May, but even then there were idle furnaces, and as the May rate was about 20 per cent above the January rate it can be seen that the half-year's production was considerably under capacity. However, the mere capacity of the furnaces is not much of a criterion as to production possibilities since raw materials must be produced and transported and limitation of output may occur there, before all furnaces in existence are operating.

The half-year's production broke the previous record, made in the second half of 1918, but by a trifle less than one per cent. On the other hand, it was 40 per cent above the production in the second half of last year and 72 per cent above the first half, while it was almost three times the output in the second half of 1921, this giving a particularly striking statistical illustration of the ups and downs of the iron and steel trade.

The general tone of the iron and steel market has undergone some further improvement in the past week. The market, on the whole, is still dull, but there is a little more buying. The important thing is not the volume of buying, as the market is expected to be very quiet in July and August, but is rather the fact that requirements of distributors and consumers, as evidenced by shipments and production, keep up so well. Steel production has undergone little if any decrease in the past few weeks. Claims made three or four months ago, that the consuming industries were active and had plain prospects of continuing active for months, are fully confirmed. It was sentiment, and the disposition to buy ahead, that changed at that time. Commercial activity decreased greatly in many lines, but actual industrial activity has decreased but little if at all.

In September, after the vacation period, there will be necessarily be an increase in steel buying, and besides this there is the point that many distributors and manufacturing consumers will have occasion to make fourth quarter contracts. It goes without saying that there will be a great increase in steel buying. A month or two ago there was doubt whether steel prices would hold, as the increased inquiry would stimulate competition, if mills stood greatly in need of business. With the improvement in tone in the past few weeks, and the maintenance of demand for contract shipments, the present prospect is regarded as plain that steel prices will hold, and if they hold through the September contracting they will in all probability hold through October and November. December will then bring another crucial period.

No little support is given to the steel market by the universal impression that the abolition of the 12-hour day will considerably increase the cost of making steel. Assertions that the change will artificially curtail production, however, are not to be taken very seriously, as the change is being made slowly, and only as men become available.

Prices remain as follows: Bars, 2.40c; Shapes, 2.50c; plates, 2.50c; blue annealed sheets, 3.00c; black sheets, 3.85c; galvanized sheets, 5.00c; merchant pipe, 62 per cent basing discount; plain wire, 2.75c; annealed wire, 2.90; wire nails, \$3.00; tin plate, \$5.50.

The widely published report that the American Sheet & Tin Plate Company last Wednesday announced prices unchanged and opened order book for fourth quarter is without any basis whatever in fact. Books will not be opened before September 4 at the earliest, and price commitments are never

made until books are opened. It is altogether probable, as it has been for several weeks, that prices when announced will be the same as heretofore prevailing.

The scrap market, which first began to show an improved tone at the end of July after four months of practically continuous weakening, has gained farther in the past week. There has been a little buying of heavy melting steel at \$18.50, or 50 cents advance in the week and \$1 on the whole movement. Predictions of \$20 scrap are already being made, it being probable that with continued heavy operation the mills will soon be forced to buy somewhat freely.

Connellsville coke has advanced about 25 cents in the week, spot or prompt being now at \$4.75 to \$5.00 for furnace and \$5.50 to \$5.75 for foundry. The recent weakness was caused by coke production not being slowed down promptly enough during July to balance the blowing out of furnaces. Eventually the decrease did occur, while in the past three or four weeks the accumulation as well as the current production has been absorbed.

Pig iron continues quiet, but there has been still another week without further declines, and this continued steadiness of prices in face of light buying must command respect. Some furnaces are piling iron, but consumers may be exhausting stocks to an equal extent, so that prospects are at least as good for an advance as for a decline.

Waiting Policy in Southern Iron Market.

Birmingham, Ala., August 27—[Special.]—The melters of pig iron are evidently holding off in buying to see what the market is going to do or are anticipating orders, and not until the latter start coming in will any turn be made for raw material. Furnace interests are waiting patiently for the buying to start in and are firmly convinced that concessions in price would hardly bring about any buying movement. There is a deadlock on in the Southern iron market apparently.

This is the picture of conditions in the pig iron market of the Birmingham district, with the production as yet undisturbed except one or two blast furnaces being blown out in the past 30 days for repairs mainly. There is some iron still going to the surplus stocks on the furnace yards but a casual survey shows that the greater portion of the piled up iron belongs to two furnace interests, the larger number not having any great amount on hand. The smaller interest which sold iron for a while at \$24 and \$25 per ton, No. 2 foundry, the production by this company not being over 300 tons a day, has withdrawn its product from the market for the time being. The larger and more active furnace interests have maintained the \$27 per ton price and insist on their belief that to have reduced prices would not have brought about any impetus in the business. Some selling has been done right along, however, in very small lots, from one to three car lots at the time. Immediate delivery is being asked on this business and the aggregate is far from being worthy of great mention. Old contracts are still in hand but the end of this month will see the beginning of the end on a large proportion of it. The coming month, with several companies and dealers, will see the filling of business on hand. But little iron, comparatively speaking, has been sold for fourth quarter delivery.

The small lot buying recently felt in this district has been by home territory consumers and the purchases showed that in the main they were to tide them over or to give further opportunity of watching the market. The pressure pipe makers, large melters of pig iron, have business on books which warrant capacity production but an authoritative statement is that these interests are still covered for awhile

and are not in the least worried as to being able to obtain their iron when desired. Sanitary pipe makers are waiting for a turn in their business, the melt in this direction having been curtailed not less than 50 per cent in the last 30 days. The demand for sanitary pipe and fittings can be filled for awhile from the warehouse stock. Building operations are still active in this section of the country and there is much sanitary pipe and fittings being used but nothing like a few months ago.

Some inquiries for pig iron came to hand in the Birmingham district during the past week from consumers in the middle west but there was not much business resulting. Birmingham furnace interests made effort to land the business. Transportation facilities are good and as a consequence all deliveries are right up to contract.

Woodward Iron Company has changed its furnace on basic back to foundry having filled its contracts on basic. This company has four basic furnaces on foundry. The Gulf States Steel Company has sufficient basic iron on hand to keep the four open hearth furnaces at its steel mills in easy operation while the blast furnace is being repaired. The Sloss-Sheffield Steel & Iron Company is the heaviest producer of pig iron in the district, having seven furnaces in blast, three at Sheffield-Florence and four in Birmingham. The three blast furnaces on the Tennessee river, have been shipping iron steadily into the Chicago-St. Louis territory, having a splendid freight differential by reason of the river haul.

The steel mill operations in the district show but little change. The one-hearth furnace less in the steel industry of course has its result, but this not very extensive. The labor situation has not been such as to warrant any rapid elimination of the 12-hour day. Plans are understood to have been made looking to putting this plan into execution ere long. No intimation is given here that there is likely to be any trouble when the new plans are put in. The legislative enactment is to be strictly enforced, announcement having been made that even advertising for labor was one of the evidences of violation of the law. Every obstacle is to be placed in the path of the labor agents or others making effort to induce labor to leave this state.

The structures are finished and machinery is being installed in the new sanitary pipe plant of the Central Coal & Iron Company, (Iron Products Company), at Holt, in Tuscaloosa county. Within a few weeks the new plant will begin nearing completion.

H. R. Stuyvesant, for the past four years with the Alabama Company as general superintendent of blast furnaces, has resigned, effective October 1. After January 1, it is stated, Mr. Stuyvesant will enter the blast furnace business in a much larger capacity.

Improvement is noted in the coal mining industry in Alabama, demand picking up, warranting four to five days operation of mines again. While no statement is made as to the probabilities of a demand from foreign sections of the country by reason of deficiency in supply in other districts, there is a belief that a strong demand for soft coal is likely before long. There is some evidence that a few of the larger consumers of fuel gotten from this district are beginning to stock up a little coal.

The coke market continues weak though production has not been cut down as yet. Quotations are also rather weak and \$8 is given as an average price for foundry coke. Demand is lagging.

The Southern Railway is having some of its car repairing and car rebuilding done at the Gadsden Car Works, steel underframe cars being rebuilt at this plant.

The Birmingham Steel Products Company is operating its plant to capacity, turning out 100 iron and steel beds daily. This concern is dealing with furniture dealers through jobbers and wholesalers and finding good market for its products.

Quotations for pig iron and iron and steel scrap follow:

PIG IRON

No. 2 foundry, 1.75 to 2.25 per cent silicon, f. o. b. furnaces, \$24.00 to \$27.00; No. 1 foundry, 2.25 to 2.75 per cent silicon, \$24.50 to \$27.50; iron of 2.75 to 3.25 per cent silicon, \$25.00 to \$28.00; iron of 3.25 to 3.75 per cent silicon, \$25.50 to \$28.50; iron of 3.75 to 4.25 per cent silicon, \$26.00 to \$29.00; charcoal iron, f. o. b. furnaces, \$33.00 to \$34.00.

OLD MATERIAL

| | | | |
|---------------------------------|---------|----|---------|
| Old steel axles | \$20.00 | to | \$21.00 |
| Old iron axles | 24.00 | to | 25.00 |
| Old steel rails | 17.00 | to | 17.50 |
| Heavy melting steel | 15.00 | to | 15.50 |
| No. 1 R. R. wrought | 14.50 | to | 15.00 |
| No. 1 cast | 19.00 | to | 20.00 |
| Stove plate | 15.00 | to | 16.00 |
| Old car wheels | 18.00 | to | 18.50 |
| Old tramcar wheels | 18.50 | to | 19.00 |
| Machine shop turnings | 8.00 | to | 9.00 |
| Cast iron borings | 9.00 | to | 9.50 |
| Cast iron borings (Chem.) | 16.50 | to | 17.00 |

RAILROADS

FIGHT TO RESTORE HOMESEEKERS RATES.

Southeastern Traffic Territory Without Them Although the West Has Had Them Two Years.

H. H. Richardson, 205 St. James Building, Jacksonville, Fla., member of the Homeseekers Rates Committee of the National Association of Real Estate Boards sends the MANUFACTURERS RECORD some interesting facts about the fight they have been making for over a year for the restoration of homeseekers rates in the Southeastern traffic territory. They include a copy of the committee's report which was read at the Cleveland convention on June 26-30 of this year which was referred to a committee of three with full power to act and a copy of the resolutions adopted by the convention.

Mr. Richardson further points out that while homeseekers rates were withdrawn from all railroads during the United States Railroad Administration control, the western lines restored these rates two years ago but efforts to secure their restoration in southeastern traffic territory have failed and he says that the southeast is being discriminated against as not only the western states but Canada enjoy such rates. However, he hopes to convince the railroad officials that it will be of advantage to their lines and to the section of the country concerned to restore them.

The committee report says that homeseekers tickets are on sale the first and third Tuesdays of every month by lines in the Western Passenger Association at the rate of approximately one fare plus \$2 for the round trip, limited to twenty days from date of sale with stop-over permitted within homeseekers territory of that Association. Furthermore, it says that the Southwestern Passenger Association also sells such tickets for one full fare plus \$2, this only when five or more adults travel together on one ticket, children's rates being proportionate as on regular tickets.

In answer to requests for reestablishing such rates in the southeastern states the Southeastern Passenger Association said that they have found from experience that these rates were used less and less by legitimate homeseekers or settlers and more and more by regular commercial passenger traffic, with so much consequent loss to the railroads on this latter kind of travel that the roads do not feel justified in establishing homeseekers rates. Besides, they assert that homeseekers' travel is now relatively small compared with what it was a number of years ago, "but this," comments the report, "is doubtless caused by the absence of homeseekers rates." And this position we think, is unquestionably correct. The argument of the railroads on that point is extremely weak.

The committee report further remarks that the position taken by the Southeastern Passenger Association is discouraging immigration into the southeast and that as to the abuse of homeseekers rates the railroads could if they wished

provide such rules governing sales of homeseekers tickets as would prohibit their use by commercial travelers. Other passenger associations named do not find that commercial travelers use such rates to any noticeable extent but they do find that the rates operate in the interest of those seeking farm locations and therefore are of great value to the railroads by developing the country, and vastly increasing the earnings of the lines in both freight and passenger traffic.

It is also remarked by the report that it may become necessary for the Committee to file formal complaint with the Interstate Commerce Commission against the carriers forming the Southeastern Passenger Association for discriminating against the southeastern traffic territory by refusing to make homeseekers rates therein.

The committee is composed of Joseph K. Brittain, Chairman; Wilbur J. Mansfield, George Payne and H. H. Richardson.

The resolutions referred to by Mr. Richardson and which were adopted by the convention of the National Association of Real Estate Boards at Cleveland, declare opposition to the idea of Government ownership of railroads and real estate men generally are asked to write to their representatives in Congress to oppose any action which might lead thereto; also that homeseekers rates should be re-established by the railroads generally, and especially in the southern and southeastern parts of the country which do not now enjoy these rates.

Ninety-Sixth Annual Report of the Baltimore & Ohio Railroad Co.

The annual report of the Baltimore & Ohio Railroad Co. for 1922, which was issued last week, shows that notwithstanding the adverse conditions of the year as a result of the coal strike and the shopmen's strike there was an increase in gross freight revenues of \$2,744,586 or 13 1/4 per cent as compared with 1921, although passenger revenues decreased \$2,626,572, and it is remarked that fewer passengers were carried than in any year since 1907, this being due to the general decline in travel. Express revenues increased \$2,371,822.

The total revenues for the year were \$200,843,169, an increase of \$1,765,316, and total railway operating expenses were \$165,021,374, a decrease of \$2,050,718, while net railway operating income as defined in the Transportation Act, was \$23,735,005, an increase of \$1,793,308. The ratio of operating expenses to operating revenues was 82.61 per cent; in 1921 it was 83.92 per cent. Very little construction work was undertaken during the year and the total amount expended for additions and betterments was \$1,551,285.

It is estimated that on a seasonal basis the loss to the company in net railway operating income by reason of the strike of the shop crafts was not less than \$7,500,000.

The operated lines of the Baltimore & Ohio Railroad System total 5212 miles in length and the equipment includes 2683 locomotives, 97,125 freight cars, 1300 passenger cars, 2375 work cars and other work equipment, 170 tug boats, car floats and other marine equipment, besides miscellaneous equipment.

The report covers the 96th year of the company's life.

Enormous Freight Traffic By Rail.

Freight traffic upon the railroads continues to be exceedingly heavy. During the week ended August 11 loadings of revenue freight totaled 973,162 cars and although this was a decrease of nearly 60,000 cars as compared with the previous week, the loadings would doubtless have again exceeded the million mark, but for the funeral of President Harding. Nevertheless, the records of the week showed an increase of

loadings as compared with last year of more than 130,000 cars and of nearly 165,000 cars as compared with the same week in 1921. Loadings in the Southern district increased as compared with last year almost 17 per cent, the highest gain in any district being in the eastern district—19.2 per cent—while the average increase for the country was 15 1/2 per cent. The total loadings since January 1 were very close to 30,000,000 cars, as compared with very nearly 25,000,000 for the same period of 1922.

During the first six months of this year the records of freight traffic showed an aggregate of more than 225,400,000,000 ton miles, an increase of 7 per cent as compared with the same period in 1920 which held the previous record.

Surplus freight cars in good repair on August 14 totaled 78,404 an increase of 4236 for the week.

Will Have to Relocate 15 Miles of Line.

In carrying out its plans to erect a big dam and a hydro-electric power plant on the Susquehanna River near Conowingo, Maryland, the Susquehanna Power Co., of which George Bullock, 61 Broadway, N. Y., is president, will have to relocate about 15 miles of track on the Columbia & Port Deposit Railroad, a branch of the Pennsylvania Railroad. This line follows the eastern bank of the Susquehanna which runs between high hills and it will be necessary to place the track high up the hillside to be above the water level when the dam is built and in use. The hills are full of rock and the construction work will be heavy. The relocation may begin at Port Deposit, Md., and extend northward 15 miles to about Haines, Pa. Two bridges, each about 500 feet long, will also have to be built and the estimated cost of all this work, it is stated, is about \$3,000,000. At the highest point the new line will be about 40 feet above the present line. Boyd Ehle is construction engineer for the power company at Conowingo, Md., and others interested include S. A. Williams, of Belair, Md., and Luther M. R. Willis, of 213 St. Paul Place, Baltimore, both of the latter being attorneys.

Baltimore & Ohio Statement for August.

The Baltimore & Ohio Railroad Company's statement of earnings and expenses for July 1923 shows: Operating revenues, \$21,488,806; increase as compared with the same month of 1922, \$7,544,783; operating expenses, \$16,505,469; increase, \$4,959,701; net revenue from railway operations, \$4,983,337; increase, \$2,585,082; net railway operating income after deducting railway tax accruals, uncollectible railway revenues, rentals, etc., \$3,876,611; increase, \$2,651,544.

The figures for the first seven months of the current year show: Operating revenues, \$151,286,195; increase as compared with the corresponding period of 1922, \$38,663,013; operating expenses, \$116,018,896; increase, \$26,774,204; net revenue from railway operations, \$35,267,299; increase, \$11,888,809; net railway operating income, \$26,702,519; increase, \$10,897,157.

Extension from Oklahoma to New Mexico or Colorado.

Concerning the projected extension of the Beaver, Meade & Englewood Railroad from Forgan to Hooker, Okla., about 40 miles, President Jacob Achenbach writes the MANUFACTURERS RECORD from Hardtner, Kan., saying: "It is our intention to make such extension and work will begin as soon as we receive permit from the Interstate Commerce Commission. Our extension will begin at Forgan, Okla., and go in a westerly direction, and perhaps will eventually terminate in the coal fields some 200 miles away in New Mexico or Colorado."

GOOD ROADS AND STREETS

Virginia Opens Bids for \$800,000 of Road and Bridge Work.

Richmond, Va.—Bids have been opened by the State Highway Commission for building a number of road and bridge projects estimated to cost \$800,000. Three roads aggregating 16.77 miles will cost a total of \$651,388, while the mileage and cost of one project for which bids were opened has not been listed. The cost of three bridges and one approach will total \$47,166.

The Cannawa Hudgins Co. of Hampton submitted lowest bid at \$46,367 for 1.8 miles of road in Elizabeth City County; McArthur & Hood of Huntington, W. Va., at \$265,248 for grading and draining 8.7 miles in Dickenson County; H. H. George, Jr. & Son, Richmond, at \$339,772 to build 6.27 miles between Louisa and Albemarle counties, and C. B. Hester of Greensboro, N. C. for a road in Campbell County.

For building approaches to Craig Creek bridge, the Preston & Pollard Co. of Bedford, Va. is lowest bidder at \$8611; bridge over Piney River in Amherst and Nelson counties, Robert W. Curtis of Lynchburg, Va. at \$14,260; bridge over Allen's Creek in Nelson County, the Preston & Pollard Co. at \$6852, and for a bridge over South Ann River in Louisa County, H. H. George, Jr. & Son at \$17,442.

West Virginia Road Contracts Awarded.

Fayetteville, W. Va., August 25—[Special.]—Contracts have been awarded by the county court of Fayette county for the construction of two additional Fayetteville district roads for which bonds were recently voted. The two sections of the road from Mt. Hope to Pax were awarded to the Fidelity Construction Co. of Mt. Hope, W. Va., J. M. Randish & Co., Huntington, W. Va., were awarded the contract for the Fayetteville-Cunard road. Total cost of three roads will be \$210,000.

In Quinimont District the contract for grading and draining the road from Quinimont to Hemlock Hollow was awarded to Waugh Bros., at a price of approximately \$50,000. Bids on the section from Springdale to Greenbrier line were considered excessive and were rejected.

In Kanawha district the court will ask for bids on the paving of 4 miles of road from Montgomery to Mt. Carbon. A 16-foot road is contemplated.

Vernon Parish Will Vote on \$500,000 Bonds.

Oakdale, La.—Three wards of Vernon Parish will vote soon on \$500,000 bonds for carrying out an extensive road building program, involving the construction of several important roads in the parish. In the event the issue carries, it is planned to build a highway connecting Fullerton and Leesville, giving a hard surfaced road from Leesville through Oakdale to the Evangeline Parish line.

A road will be constructed north and south through Leesville from the Beauregard Parish line near Ludington to the Natchitoches Parish line, and another to extend east and west from the Rapides Parish line to the Sabine River.

Reeves County Will Build 15 Miles of Road.

Pecos, Tex.—Reeves County plans to build 15.5 miles of 18-foot gravel road on the Old Spanish Trail, extending from the intersection of State highway No. 1 to Toyahvale. This is federal aid project No. 408, and \$10,128 of federal aid funds will be available, the entire estimated cost of construction being \$100,040. Plans for the road have been approved by the United States Bureau of Public Roads at Washington. A. J. Adcock of Balmorhea, Tex., is the resident engineer.

Brewster County Wants Bids for 24 Miles.

Alpine, Tex.—Brewster County, M. S. Burke county judge and A. L. White, county engineer, both of Alpine, will receive bids until September 20 for building two sections of highway with a total mileage of more than 24 miles. Both of these sections are located on state highway No. 12, one embracing 15.7 miles from Alpine to Altuda and the other 8.53 miles from Alpine to the Jeff Davis County line.

Notes on Good Roads Construction.

Contract has been awarded to J. R. Strouddy of Okolona, Miss., by the board of supervisors of Grenada County, Mississippi, for building 16 miles of gravel road in the county. The cost will be \$115,940.

Fayette County, Texas, Capt. A. Schlafle, county engineer, La Grange, Tex., will build 14 miles of road between La Grange and the Colorado County line at an estimated cost of \$150,000.

Hotel Corporation Sells \$3,000,000 of Bonds—Is Erecting \$6,500,000 Twelve-Story Structure at Atlanta.

Atlanta, Ga.—First mortgage bonds to the amount of \$3,000,000 have been sold by the Atlanta Biltmore Hotel Corporation, to the Citizens & Southern Bank of Savannah and Atlanta and the Marine Bank & Trust Co. and Whitney-Central Trust & Savings Bank, both of New Orleans. These bonds will be a direct obligation of the Atlanta Biltmore Hotel Corporation, of which John McE. Bowman of New York is president and William Candler of Atlanta is vice-president, being secured by a closed first mortgage on the new hotel being erected here at a cost of \$6,500,000. It is expected that the bonds will soon be offered to the public.

The new hotel is located at West Peachtree and Sixth streets and will be 12 stories high, containing 550 guest rooms and 480 baths. There will also be an apartment building of 120 rooms. The hotel and apartment will cover an entire block and will be of fireproof construction, equipped with furnishings and facilities of a quality to meet the increasing demand for the best accommodations. Schultze & Weaver are the architects and Starrett Bros. are the general contractors, both of New York.

The management of the new hotel will be under the direction of Mr. Bowman, who operates the Biltmore and Commodore hotels in New York, in addition to other large hotels in different sections of the East.

Huge Coal Movement to Lake Erie Ports.

The heavy movement of bituminous coal this year is reflected in a statement from the car service division of the American Railway Association which says that from January 1 to August 20 there were 17,876,979 tons of bituminous coal carried by rail and dumped into vessels at Lake Erie ports for shipment up the Great Lakes. This huge total compares with the same period in other years as follows: 1922, 4,955,455 tons; 1921, 15,438,046 tons; 1920, 9,649,929 tons; 1919, 15,093,906 tons; 1918, 15,301,666 tons, so that it will be observed that the movement of coal has been greater so far this year than in the war year of 1918, as well as in any of the other years cited. However, while the bituminous coal movement to Lake Erie ports during the week ended August 20 was greater by several thousands of tons than during the same week in 1922 and 1921, it was a little more than 3000 tons less than that week in 1920. The great falling off in shipments last year was, of course, a result of the miners' strike.

TEXTILE

United States Finishing Company's Plant.

Further details relative to the establishment at Cedartown, Ga., of a bleaching and dyeing plant by the United States Finishing Co., of New York, an account of which was published in the MANUFACTURERS RECORD last week, have been supplied by Robert & Co., Inc., of Atlanta, consulting engineers for the erection of the plant, who wire as follows:

"United States Finishing Co. will immediately rebuild existing building, 300 feet long by 60 feet wide; will build new building, 150 feet long by 50 feet wide and rebuild 25 houses, cost \$40,000; contractor, Griffin-Hodges Co., Atlanta; will also build pumping plant and earth dam, contract not let; will later considerably expand the plant; Paul A. Merriam is manager."

The company is capitalized at nearly \$8,000,000 and operates a number of plants in New England, having an annual production of 350,000,000 yards of finished cotton piece goods. It is understood that the Cedartown plant will ultimately involve an expenditure of more than \$1,000,000.

\$10,000,000 Being Expended in Vicinity of Greenville for New Mills and Extensions.

Greenville, S. C.—Within a radius of 20 miles of this city a total of \$10,000,000 is being expended for the construction and equipment of new cotton mills and extensions to existing plants. The largest expenditure for a single enterprise is that of the Pacific Mills which is erecting a \$5,000,000 bleachery and finishing plant at Lyman in Spartanburg County. The Southern Bleachery, Inc. is erecting a bleachery and finishing plant on the Greenville-Spartanburg highway at a cost of \$1,000,000, while a second \$1,000,000 enterprise is that of the Southern Worsted Corporation which is building a mill near Paris, about seven miles from Greenville.

Extensive additions are being made to the Dunean Mills at a cost of \$1,500,000 and \$600,000 is being expended by the Judson Mills for enlargements. In addition, improvements have about been completed for the Union Bleachery, three miles from Greenville, and for the Mills Mill here.

Addition for Lebanon Woolen Mills.

Lebanon, Tenn., August 25—[Special.]—Alterations and additions to the plant of the Lebanon Woolen Mills, Inc. will involve the erection of two mill-type buildings, 50 by 65 feet and 63 by 74 feet, the former three stories and the latter two stories. The total cost will be about \$50,000 and the Tennessee Manufacturing & Construction Co. of Lebanon is the contractor. Twenty looms will be installed. Donald Southgate of Nashville is the architect.

In addition to the general contract, other contracts have been awarded, including heating, to Mongold & Hempel; electric lighting, to Fulcher Bros.; both Nashville; sprinkler, to Globe Automatic Sprinkler Co., Philadelphia.

Officers of the Lebanon Woolen Mills, Inc. are J. E. Edgerton, president; A. B. Humphreys, vice-president; G. H. Possman, secretary, and Howard E. Edgerton, superintendent.

Contract Let for Geneva Cotton Mills.

Geneva, Ala.—Contract has been awarded to D. H. Morris, Jr. of Geneva to erect the proposed mill here for the Geneva Cotton Mills, recently incorporated with a capital stock of \$150,000. The building will be 325 by 106 feet, of brick construction, with hardwood floors and composition roof, and will cost about \$60,000. Work is expected to be completed in five months. Incorporators of the Geneva Cotton Mills include Mr. Morris, W. O. Mulkey and others.

Walton Cotton Mill Floor Space to Be Increased to 116,300 Square Feet.

Monroe, Ga., August 25—[Special.]—Work is progressing on the additions which the Walton Cotton Mills Co. are building to its plant here. The enlargement will increase the floor space from approximately 52,200 square feet to 116,300 square feet. Brick walls of the main mill extensions west, south and north, are up to the first floor level and all piers for basement columns are in place. Walls on the weave shed extension, east, south and north, are up to the roof timber height and floor framing is completed, but no flooring has yet been laid. The opener room has been completed with the exception of window sash. Concrete window sills are being poured and Truscon steel sash are being used throughout.

Construction is under the supervision of Lockwood, Greene & Co., engineers of Atlanta and Boston, and Arthur K. Adams & Co. are the contractors.

Will Build 6000-Spindle Mill.

High Point, N. C., August 25—[Special.]—The Millis Cotton Mill, Inc., reference to which was made in the MANUFACTURERS RECORD several weeks ago, has organized with a capital stock of \$175,000 and will build a mill here of 6000 spindles for the production of hosiery yarns. The mill building will be of brick, 400 by 75 feet, and will house \$100,000 worth of machinery to be electrically driven. R. C. Biberstein of Charlotte is the engineer.

Officers of the company include H. A. Millis, president, treasurer and manager; R. R. Ragan, vice-president; G. R. Johnson, secretary, and J. W. Kaneer, superintendent.

Company Incorporates to Operate Alice Mills.

Easley, S. C.—With a capital stock of \$1,000,000 divided into 5000 shares each of common and preferred stock, the Alice Manufacturing Co. has been incorporated by E. S. McKissick, E. A. Smyth and A. J. Graham, all of Greenville. The new company will operate the old Alice mills here and in its petition for a charter sets forth that it will manufacture, bleach, dye, convert and sell cotton, silk and woolen goods, etc.

Officers of the company include Ellison S. McKissick, president and treasurer; A. Foster McKissick, vice-president, and D. S. Burnside, secretary.

Contract for Harriet Cotton Mills Improvements.

Henderson, N. C., August 25—[Special.]—The Harriet Cotton Mills here have awarded contract to the Fisk-Carter Construction Co. of Greenville, S. C., for an extension to mill No. 3. This extension will be a two-story building, 100 by 104 feet, and will permit an increase of 50 per cent in the capacity of the mill. The present installation, however, will consist of approximately 4000 twister spindles, spoolers, winders and ball warpers. J. E. Sirrine & Co. of Greenville, are the engineers.

\$1,000,000 Company to Operate Seneca Mills.

Seneca, S. C.—Goddard Bros. of Providence, R. I., who recently purchased the Seneca plant of the Victor-Monaghan Co. of Greenville, S. C., have organized the Seneca Co., capitalized at \$1,000,000, to operate the mill. Incorporators of the new company are R. H. I. Goddard, J. O. Ames and W. Gammell, all of Providence.

The mill is equipped with 19,840 spindles and 450 looms.

Stockholders of the Manetta Mill, Lando, S. C., will meet September 4 at Chester, S. C., to consider increasing the capital stock of the company by an amount not to exceed \$150,000. The company is at present capitalized at \$300,000. H. B. Heath of Charlotte, N. C. is the president.

LUMBER AND BUILDING MATERIALS

Slight Change in Lumber Movement.

Washington, August 23—Production of lumber in the United States, as reflected by 390 of the larger commercial sawmills of the country, was about the same for last week, as for the preceding week, (based on revised reports from 392 mills), says the National Lumber Manufacturers Association. Shipments showed an increase of about 3 per cent and new business a decrease of approximately 3 per cent. With 128 mills reporting as against 122 for the week before, unfilled orders of West Coast mills increased from 305,893,356 feet to 325,860,186 feet, and 137 Southern pine mills showed a decline in their order file from 231,411,399 feet to 223,839,786 feet.

For all the reporting mills, shipments were 85 per cent and orders were 76 per cent of actual production; for the Southern Pine Association mills these percentages were 94 and 85 and for the mills of the West Coast Lumbermen's Association, 89 and 84 per cent. Of the entire number of reporting mills, 359 reported normal production for the week, in relation to which actual production was 108 per cent; shipments 94 and orders 85 per cent.

The following table compares the lumber movement for the three weeks designated:

| | Past Week 390 | Corresponding Week 1922 386 | Preceding Week 1923 (Revised) 392 |
|------------------|------------------|-----------------------------------|--|
| Mills | 390 | 386 | 392 |
| Production | 259,305,080 | 239,268,397 | 261,708,204 |
| Shipments | 220,907,864 | 210,034,018 | 215,271,913 |
| Orders | 197,797,789 | 227,369,561 | 203,628,650 |

For the first 33 weeks of 1923 and the corresponding weeks of 1922 the lumber movement of reporting mills was as follows:

| | Production | Shipments | Orders |
|-------------------|---------------|---------------|---------------|
| 1923 | 8,267,570,284 | 8,287,450,163 | 8,193,307,052 |
| 1922 | 6,942,857,907 | 6,900,666,282 | 7,405,047,392 |
| 1923 Increase ... | 1,324,712,377 | 1,386,783,881 | 788,259,660 |

The Southern Pine Association reports an increase in orders of 2.6 per cent over the previous week, with slight decreases in production and shipments. Of 81 mills giving their running time, 56 operated full time and 10 reported over-time, including four on double shift.

The West Coast Lumbermen's Association wires from Seattle that production of reporting mills for the week was 23

per cent above normal production, new business 16 per cent below production, and shipments 5 per cent above new business. Forty-five per cent of all new business taken during the week was for future water delivery and amounted to 39,991,970 feet, of which 28,566,376 feet was for domestic cargo delivery and 11,425,594 for export. New business by rail amounted to 1500 cars or 32,947,479 feet. Of the week's lumber shipments, 35 per cent, or 32,947,479 feet moved by water, of which 22,678,899 feet moved coastwise and inter-coastal, and 10,268,580 feet went overseas. Rail shipments totalled 1880 cars. Local auto and team deliveries amounted to 4,461,311 feet. Unfilled domestic cargo orders totalled 140,121,082 feet; unfilled export orders 75,699,104 feet and unfilled rail trade orders 5552 cars. In the first 33 weeks of the year production reported to the West Coast Association has been 3,246,637,066 feet; new business 3,304,430,425 feet, and shipments 3,482,934,960 feet.

The California White and Sugar Pine Manufacturers Association wires from San Francisco that labor, car and log supply is normal; the weather fair, and sources of demand general. It reports a serious uncontrolled fire as raging in the redwood region.

Steady Paving Brick Production.

Continued steady production of vitrified paving brick indicates a healthy business condition in the industry, and continued active brick street and road construction work during the balance of the season, according to the National Paving Brick Manufacturers Association.

The July statistical report covering sixty-eight per cent of the normal tonnage capacity of the industry, just issued by the Association, shows production and shipments keeping pace with previous months.

Production for July was 30,529,000 and shipments 27,092,000 compared with production during June of 31,105,000 and shipments of 27,251,000. Stock on hand of 78,835,000 brick is reported.

July shipments were made into thirty states and Canada, with Ohio leading in consumption followed by Illinois, Texas, Iowa and Pennsylvania in the order named.

LUMBER MOVEMENT FOR THIRTY THREE WEEKS, AND FOR THE WEEK ENDING AUGUST 18.

| | Production | | Shipments | | Orders | |
|---|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| | 1923 | 1922 | 1923 | 1922 | 1923 | 1922 |
| Southern Pine Association: | | | | | | |
| Total | 2,552,283,699 | 2,421,469,039 | 2,635,135,486 | 2,425,793,411 | 2,448,781,050 | 2,604,997,341 |
| Week (137 mills) | 76,674,512 | 76,609,169 | 72,449,944 | 67,119,184 | 64,878,331 | 89,196,778 |
| West Coast Lumbermen's Ass'n: | | | | | | |
| Total | 3,246,636,435 | 2,661,110,032 | 3,482,771,561 | 2,622,251,513 | 3,304,396,462 | 2,648,473,143 |
| Week (128 mills) | 105,962,031 | 86,854,018 | 93,808,790 | 77,212,387 | 89,453,281 | 72,528,987 |
| Western Pine Mfrs. Association: | | | | | | |
| Total | 921,581,000 | 705,068,000 | 838,105,000 | 819,429,000 | 770,700,000 | 848,825,000 |
| Week (35 mills) | 33,306,000 | 33,700,000 | 21,570,000 | 26,177,000 | 17,150,000 | 26,175,000 |
| Calif. White & Sugar Pine Mfrs.: | | | | | | |
| Total | 544,523,000 | 284,332,000 | 375,026,000 | 208,324,000 | 827,801,000 | 463,522,000 |
| Week (13 mills) | 18,502,000 | 12,025,000 | 10,580,000 | 9,314,000 | 8,337,000 | 5,135,000 |
| Calif. Redwood Association: | | | | | | |
| Total | 293,829,000 | 244,381,000 | 301,701,000 | 222,490,000 | 293,129,000 | 238,727,000 |
| Week (15 mills) | 10,692,000 | 9,143,000 | 9,862,000 | 7,726,000 | 6,209,000 | 10,378,000 |
| North Carolina Pine Association: | | | | | | |
| Total | 291,610,250 | 275,327,245 | 307,752,716 | 263,522,183 | 241,329,640 | 271,719,908 |
| Week (44 mills) | 10,221,537 | 8,021,994 | 8,236,130 | 8,499,930 | 8,500,177 | 10,130,796 |
| Northern Hemlock & Hardwood: | | | | | | |
| (Softwood) Total | 84,723,000 | 67,376,000 | 85,160,000 | 90,660,000 | 76,665,000 | 87,866,000 |
| Week (18 mills) | 2,268,000 | 2,186,000 | 1,849,000 | 3,047,000 | 1,333,000 | 2,965,000 |
| Northern Pine Mfrs. Association: | | | | | | |
| Total | 332,383,900 | 283,794,591 | 261,798,400 | 248,196,175 | 230,505,900 | 240,917,000 |
| Week | no report | 10,729,216 | no report | 10,938,517 | no report | 10,860,000 |
| General Total for 33 weeks: | | | | | | |
| (Softwood) | 8,267,570,284 | 6,942,857,907 | 8,287,450,163 | 6,900,666,282 | 8,193,307,052 | 7,405,047,392 |
| Northern Hemlock & Hardwood: | | | | | | |
| (Hardwood) 33 weeks | 99,698,000 | | 98,504,000 | | 89,654,000 | |
| General Total for Week | 259,305,080 | 239,268,397 | 220,907,864 | 210,034,018 | 197,797,789 | 227,369,561 |

Report on Southern Pine.

The Southern Pine Association for the week ended August 17 reports as follows on 137 mills:

| | Cars | Feet |
|--|--------|-------------|
| Orders on hand beginning of week | 10,911 | 231,411,399 |
| Orders received during week | 3,059 | 64,878,331 |
| Total | 13,970 | 296,289,730 |
| Shipments during week | 3,416 | 72,449,944 |
| Orders on hand end of week | 10,554 | 223,839,786 |

Production for the week was 76,674,512 feet. Shipments were 4,224,568 feet below production or 5.51 per cent. Orders were 11,796,181 feet below production or 15.38 per cent. Orders were 10.45 per cent or 7,571,613 feet below shipments. The week was 7,824,444 feet or 9.26 per cent below normal production, and orders were 23.22 per cent, or 19,620,625 feet below normal production. The decrease in orders on hand amounted to 7,571,613 feet, or 3.27 per cent.

North Carolina Pine Report.

The North Carolina Pine Association reports as follows on 43 mills for the week ending August 18:

| | Total Feet |
|-------------------------|------------|
| Orders | 7,127,177 |
| Shipments | 7,376,433 |
| Production | 8,711,282 |
| Normal Production | 11,838,000 |

The orders were 3 per cent below shipments, 18 per cent below actual production and 40 per cent below normal production. Shipments were 15 per cent below actual production and 37 per cent below normal production. Actual production was 26 per cent below normal. The week shows an increase in orders of 1,704,825 feet or 24 per cent.

Power Company Files \$3,500,000 Mortgage—Provide Funds for Recent Purchase and New Construction.

Staunton, Va., August 25.—[Special]—In connection with the recent consolidation of electric light, traction and power companies extending across the state of Virginia from Charlottesville into West Virginia, the Virginia-Western Power Co., Clifton Forge, Va., has filed a \$3,500,000 mortgage in favor of the Pennsylvania Co. in the office of the county clerk of Augusta, Albemarle and Alleghany counties and in the city of Staunton. This mortgage is to protect an issue of bonds of the Virginia-Western Power Company, issued for the purpose of purchasing the properties of the Riverside Light and Power Co., Staunton Lighting Co., an electric company at Charlottesville and the Charlottesville & Albemarle Ry. Co., and for the construction of a high power transmission line from Charlottesville into West Virginia.

Inasmuch as the contract for construction work has already been awarded to Francis R. Weller, of Washington, D. C., officials of the power company believe that it will be possible to complete construction of the transmission line within the next three or four months.

Coal Lands Purchased—Will Develop.

Wheeling, W. Va., August 22.—[Special.]—Purchase of 150 acres of coal land in Beech Bottom by A. S. Burger and associates from H. McCord, is the forerunner of further development of the resources of that section, for it is the intention of the purchasers to drive openings, build one or more tipples and a number of dwellings for miners, all with a view to producing coal on a large scale. The Pittsburgh vein will be tapped in the Beech Bottom section. In building a tippie or tipples, Mr. Burger and those associated with him will make provision for shipping coal either by rail or water. In all about 40 miners' houses will be erected. The purchase price for the 150 acres is said to have been approximately \$60,000. There is a possibility that the purchasers may acquire additional acreage in the same section of the Northern Panhandle.

MECHANICAL

New Pressed Steel Shafting Hanger.

About twenty-five years ago the first pressed steel pulleys were produced and offered to the trade by the American Pulley Company, of Philadelphia, and the same company is now offering for the first time a pressed steel shafting hanger of new design, which is illustrated herein. The "American" pulley of this make has always been a leader in its field and it is believed that the shafting hangers—although others have been on the market for some time—will be equally prominent and popular.

It will be observed that the hanger is made entirely of pressed steel and is of the four point, set screw type. Besides, it is of the "parting" variety; that is, it has a swing



HANGER AS IT APPEARS IN POSITION.

yoke which readily permits removal of shaft or bearing. The main frame consists of two stampings face to face, with turned flanges extending the whole length of the leg and these flanges give the hanger unusual strength and rigidity. The cross brace is integral with the legs themselves, so that the entire frame is exceptionally rugged and serviceable.

All of the bolts and nuts, as well as the set screws, in the hanger are of standard sizes and all of them are accessible and handy when replacement may be required. The foot of the hanger is of heavy, cold drawn, seamless metal, ample to sustain the pressure of clamping bolts or lag screws. The foot is attached to the oval frame leg through the seamless flange on the foot by means of heavy rivets. The hanger is amply strong for all ordinary working loads, plus a good margin of safety. It is made in regular drops—7 inches to 24 inches—and for all shaft sizes up to 3 inches.

There is also offered with the hanger a babbitted bearing box of neat appearance, which is provided with a capacious oil reservoir.

Wheeling Steel Corporation to Issue \$75,000,000 Bonds—Proceeds to Provide Working Capital.

Wheeling, W. Va.—Stockholders of the Wheeling Steel Corporation here have approved a bond issue of \$75,000,000, and preliminary details in connection with the issuance of the certificates have been completed. It is stated that a very small amount of the bonds will be offered for sale, the issue being primarily for working capital and will not affect the stability of the stock.

Construction Department

EXPLANATORY

Additional information is published about all enterprises mentioned in this department as soon as such data can be obtained. Further facts about any incomplete or incorrect item reported in these columns are always appreciated.

DAILY BULLETIN

The Daily Bulletin is published every business day to enable its subscribers to follow up promptly the industrial, commercial, railroad, financial, building and general business development of the South and Southwest. To machinery manufacturers and dealers, contractors, engineers, and others who require daily information of every new enterprise organized and details about important additions to enterprises already established, the Daily Bulletin is invaluable. Subscription price, \$20.00 a year.

Bridges, Culverts and Viaducts

Fla., West Palm Beach—Palm Beach will receive bids until September 5 for the construction of timber pile bridge across the Rita river, about three eighths of a mi. east of where the Cross State Highway intersects the Miami Canal, in Section; R. L. McCarley, Chmn. Board of County Commrs.

Ga., Augusta—Richmond and Jefferson Counties plan building Peterson's bridge over Brier Creek; estimated cost \$30,000. Address County Commrs., Richmond County.

Louisiana—Louisiana Highway Comn., Raymond Building, Baton Rouge, La., will receive bids until October 2 for construction of highway bridge and approaches over the Mermentau river at Mermentau, Federal Aid Project No. 122; J. M. Fourmy, State Highway Engr., and W. T. Peterman, Louisiana, Highway Comn.

Louisiana—Louisiana Highway Comn., Raymond Building, Baton Rouge, La., will receive bids until September 4 for the construction of highway overhead crossing on the following highways; State Aid Project 96, Station D, Jena-Alexander Highway, LaSalle Parish. W. T. Peterman, Chmn., Louisiana Highway Comn. and J. M. Fourmy, State Highway Engr.

Md., Baltimore—State Roads Comn., 601 Garrett Building, Baltimore, Md., let contract to Development and Construction Co., American Bldg., Baltimore, Md., at \$25,330, for placing fill for approaches to the Severn River Bridge (45,000 cu. yds.), at Annapolis, Md. J. N. Mackall, Ch. Engr.

Mo., Cape Girardeau—State Highway Comn. plans construction of bridge to span the diversion channel south of Cape Girardeau; estimated cost \$100,000; Frank B. Newton, District Engr., State Highway Comn.

Mo., St. Louis—City will receive bids until September 25 for construction of culvert over the River des Peres at Delmar boulevard and the Wabash tracks. (Lately noted.)

N. C., Winston-Salem—The Public Works Comn. received low bid from J. L. Crouse, at \$11,157, for construction of reinforced concrete bridge over 5th St. at Vine St.

Tenn., Columbia—Maury County will receive bids until September 6 for construction of 2 bridges; bridge over Carter's creek at Darks Mill on the Carter's Creek pike and bridge over Gibsons branch on Mooresville pike. Address Road Superintendent.

Tex., Beeville—Bee County will receive bids until September 14 for construction of low water bridge over Medio Creek, South of Blanconia on the Woodsboro road; Felix J. Hart, County Judge.

Tex., Canadian—Hemphill County will receive bids until Sept. 15 for construction of concrete girder span bridge across Washita river, 14 spans, 24 ft. 6 in. each on concrete piling, 84,234 lbs. reinforcing steel; plans at office of State Highway Engr. and R. H. Spiller, County Engr., Canadian, Tex.

Va., Richmond—State Highway Comn. received low bids on 4 bridges and approaches to bridges as follows:

Project S-196, Route 22, approaches to Craig Creek bridges in County, Preston & Pollard, Bedford, at \$8611.02; Project 248-B, Route 18, bridge over Piney River, in Amherst and Nelson Counties, Robert W. Curtis, Lynchburg, at \$14,260.91; Project 248-C, Route 18, bridge over Allen's Creek, Nelson County, Preston & Pollard, Bedford, at \$6852.25; Project 276-B, Route 39, bridge over the South Anna River, Louisa County, H. H. George, Jr., & Son, Richmond, at \$17,442.45.

Canning and Packing Plants

Ala., Brewton—Brewton Canning Co., Inc., capital \$9200, chartered by G. F. Arnold, C. B. Crook and E. M. Blacksher.

Fla., Waverly—Waverly Citrus Growers Assn., W. C. Pederson, Mgr., will expend about \$10,000 in improvements to plant; will increase yearly capacity to 125,000 boxes.

Clayworking Plants

Fla., Pensacola—P. S. Lavender of Tuscaloosa, Ala., will establish plant to manufacture flower pots, flues, etc.

Tex., Dallas—Love Field Potteries, Inc., L. S. McKaney, Pres., 3617 Crescent Ave., has building and will install clay working machinery and kilns, cost \$20,000; machinery purchased. Lately noted. (See Machinery Wanted—Corliss Engine.)

Coal Mines and Coke Ovens

Fla., Miami—Details under Land Developments.

Ky., Mogg—Green River Fuel Co., increased capital from \$20,000 to \$75,000.

N. C., Gulf—Deep River Coal Co., Inc., main office Danville, Va., (lately noted incorporated) organized with A. C. Conway, Pres.; E. P. Crider, Sec.-Treas.; has 400 acres coal land; estimated daily output 500 tons under full development. Address machinery proposals to C. H. Gunter, Construction Engr., Gulf, N. C.

Tennessee—Pittsburgh capitalist reported as having secured option on coal lands in Campbell County of the East Tennessee Iron & Coal Co., Knoxville, Tenn., of which Gen. L. D. Tyson, is Pres.; also purchased 10,000 acres coal lands from the Waldensia Coal & Coke Co., Waldensia, Tenn. Gen. L. D. Tyson wires Manufacturers Record, cannot give out information at this time.

Va., Berkeley, Sta. Norfolk—Fred W. Beasley and Stanwood Williamson has acquired plant of the Virginia Fuel Briquette Co.; will operate.

Va., Portsmouth—Virginia Fuel Corp., capital \$74,000, chartered with F. W. Beasley, Pres.; Lida Harper, Sec.

Va., Roanoke—Crova Coal Corp., Room 3,

Pythian Bldg., capital \$25,000, chartered with M. J. Anderson, Pres., Salem, Va.; Sam F. Dickerson, Sec.-Treas. and Mgr., Roanoke; has 52 acres coal land; initial daily output 2 cars; receive bids until Sept. 1 on mining machinery. Address M. J. Anderson.

W. Va., Monongalia County—W. K. Hatfield, of Morgantown, W. Va., has acquired 110 acres coal land; will develop.

Concrete and Cement Plants

Tex., Gonzales—Gonzales Cement Works, incorporated by A. O. Neaman, R. M. Somill and others.

Cotton Compresses and Gins

Ala., Boligee—Greene County Ginning & Cotton Co., H. T. Bouchelle, Sec., (lately noted incorporated, capital \$20,000) has building; will install four 70 saw automatic gin stands, double box press, 84 h.p. Bessemer crude oil engine; machinery purchased. (See Machinery Wanted—Tank (Storage); Cotton Rope.)

Tex., Lytton Springs—Lytton Springs Gin Co., capital \$8000, incorporated by A. S. Rife, W. F. Forester and others.

Tex., Riesel—Riesel Gin Co., increased capital from \$12,000 to \$20,000.

Tex., Salado—Salado Farmers Gin Co., incorporated by W. J. Tyson, N. L. Shanklin and others.

Tex., Tom Bean—H. L. Rickette, P. H. Luby will rebuild cotton gin burned at loss of \$15,000.

Cottonseed-Oil Mills

Tenn., Memphis—Dixie Cotton Oil Co. of Little Rock, Ark., has acquired plant and equipment of American Cotton Oil Co. in Hollywood; will operate.

Tex., Waco—Industrial Cotton Oil Co., lately noted incorporated with \$150,000 capital, J. M. Ford, Mgr.; has acquired plant of the American Cotton Oil Co.

Va., Emporia—Emporia Cotton Seed Oil Co. capital \$35,000, incorporated with C. L. Vincent, Pres.; Emporia; J. E. Jipscomb, Sec., Greenville, S. C.

Drainage and Irrigation

Ark., Newport—Cache River Drainage Dist. Comms. of Jackson and Poinsett Counties will construct 30 mi. main ditch through district making outlet for 90 mi. of the Cache river ditches; reclaiming about 110,000 acres lands; estimated cost \$1,000,000; Bowman Engineering Co., Engr., Newport, Ark.; Morgan Engineering Co., Conslt. Engrs., Memphis, Tenn.

Fla., Moore Haven—Disston Island Drainage Dist., C. L. Williams, Sec.-Treas., will construct 25 mi. dikes in Glades County for protection from the overflow of Lake Okeechobee and Lake Hicpochee; contract let to Kirby & Myler, Civil Engrs., for surveys, plans, specifications and supervision of work; estimated cost \$500,000.

In writing to parties mentioned in this department it will be of advantage to all concerned if the Manufacturers Record is mentioned.

Fla., West Palm Beach—Pahokee Drainage Dist. Comms. will construct main ditch to connect Pelican Lake straight east with the West Palm Beach canal; soon invite bids; Karl Riddle, Chief Engr. of Dist.; F. C. Elliott, Chief Engr. Everglades Drainage Dist.

Miss., Clarksdale—Comms. of Sevier Lake Drainage Dist. of Coahoma County will receive bids until Sept. 11 for the following works:

Contract No. 1—Cleaning and enlarging main ditch, 205,300 cu. yds.;

Contract No. 2—Cleaning and enlarging in laterals Nos. 1, 2 and 5; new work in Laterals Nos. 0, 1A, 2A and No. 4A; new extension in laterals Nos. 1 and 2, totaling 147,100 cu. yds.;

Contract No. 3—Clearing and enlarging laterals Nos. 6 and 8; new work extension in lateral No. 6; new work in laterals Nos. 6A, 7, 7A, 7B and 8A; totaling 164,650 cu. yds.; specifications on file at office of Southern Engineering Co., Engr., and Ross-Clinton Co., both Clarksdale.

Electric Light and Power Plants

Ala., Montgomery—Montgomery Improvement Assn., Sidney Gagenheimer, Pres., interested in plans for installing white way in business district.

Ala., Russellville—Alabama Power Co., Montgomery, Ala., reported to construct electric transmission line from Montgomery to Russellville to supply light and power.

Ark., Forrest City—C. A. Ahlstedt, Forrest City, has contract to erect power house; cost \$12,500; Estes W. Mann, Archt., Memphis, Tenn.

Ark., Hot Springs—Arkansas Light & Power Co., H. C. Couch, Pres., is constructing Remmel Dam on Ouachita River between Malvern and Hot Springs to develop 15,000 h.p.; cost \$1,500,000; 50 to 60 ft. high; 900 ft. long at crest; Ford, Bacon & Davis, Engrs., 15 Broadway, N. Y.; Amberson Construction Co., New York, sub contrs. (Lately noted.)

Fla., Jacksonville—City Comm., F. H. Owens, Jr., Chmn. of Utilities Comm. let the following contracts for electric light plants:

To Gerbrich & Haugard at \$51,302 for Talleyrand plant extension and at \$3980 for the Enterprise Sr. substation; to W. T. Hadlow, Jacksonville, Fla., at \$14,744 to erect Riverside sub-station; to Virginia Bridge and Iron Co., Roanoke, Va. for structural steel; to Truscon Steel Co., Youngstown, Ohio, for steel windows, operating gear, glass and putty; to Rust Engineering Co., 1901 Fifth Ave., Pittsburgh, Pa., for boiler brick work; to Liptack Fire Brick Arch Co.,

846 Builders Exchange Bldg., Minneapolis, Minn., for fire brick tile; to Boiler Equipment Service Co., to supply fire brick and fire clay; to Diamond Power Specialty Co., Oakland and Caniff Sts., Detroit, Mich., at \$12,600 for soot blowers; to Grinnell Co., 260 W. Exchange St., Providence, R. I., for piping; to Joseph Oats & Co., 228 Quarry, Philadelphia, Pa., for copper expansion joint for the turbine; to Ehret Magnesia Manufacturing Co., Land Title Bldg., Philadelphia, Pa., for pipe covering; to Chapman Valve Manufacturing Co., Indian Orchard, Mass., Edward Valve Manufacturing Co., East Chicago, Ind. and Schade Valve Manufacturing Co., 2528 North American St., Philadelphia, Pa., for valves; total cost \$175,000; Scofield Engineering Co., Const. Engrs., Philadelphia, Pa. (Lately noted.)

Ky., Bowling Green—Kentucky Public Service Co. increased capital from \$1,500,000 to \$3,000,000.

Ky., Louisville—Kentucky Utilities Corp. increased capital from \$5,000,000 to \$10,000,000.

Ky., Louisville—Louisville Hydro-Electric Co. has been granted preliminary permit to protect its priority while working out plans with Government engineers for combined navigation and power projects; government will reconstruct dam at Falls of Ohio River; concrete structure probably with removable top; company will develop 75,000 to 100,000 h.p.; date of beginning construction indefinite. (Lately noted.)

Ky., St. Charles—St. Charles Electric Light & Power Co., incorporated by W. L. Morse, H. E. Kinnett and others.

La., Baton Rouge—City will vote in Sept. on granting franchise to Baton Rouge Electric Co.; company plans to expend about \$500,000 in improvements and extensions to facilities.

La., Monroe—City let contract at \$42,000 to General Electric Co., Schenectady, N. Y. for 2500 k.w. turbo generator to be installed at power house.

La., Washington—City, A. J. Muller, Mayor will receive bids until Sept. 13 to furnish material and construct electric light plant; work will consist of the following: two 50 k.w. 80 per cent P.F., 3 phase, 60 cycle, 2300 volt, alternating current generators, direct connected to oil engines; switchboard; oil storage tank; electrical light and power distribution system; transformers, etc.; motor driven, vertical type, service pump for water supply with pumping pit therefor and furnish all material and constructing steel frame galvanized iron station house; plans, etc., at

office of Sylvester Bros., Engrs., Alexander, La.

Md., Hagerstown—Potomac Transmission Co., Wingert Bldg., (subsidiary of American Water Works Co.) incorporated by Delano Andrews, Horace R. Lamb, and others; will have charge of distribution of electric current to be generated at plant in Williamsport, Md.; West Virginia Transmission Co. will be incorporated to handle distribution in West Virginia.

Mo., Bolivar—City will establish new light plant, install oil engines and other equipment; W. E. Rice, Mayor. Lately noted. (See Machinery Wanted—Engines (Oil); Electric Light Equipment.)

Mo., Cameron—Details under Water Works.

Mo., Mountain Grove—City will vote on \$35,000 bonds for electric light plant. Address The Mayor.

N. C., Sylva—Details under Land Developments.

Tex., Oak Cliff, Sta. Dallas—O. T. Cox is chairman of committee to plan installation of white way on Tyler St.

Va., Charlottesville—Virginia-Western Power Co., general office Clifton Forge, Va., let contract to Francis R. Weller, Contr., Mills Bldg., Washington, for construction of proposed double circuit steel tower 110,000 volt transmission line between Charlottesville and Staunton. (Lately noted.)

Va., Roanoke—Details under Land Development.

Fertilizer Plants.

Ga., Savannah—Swift Fertilizer Works acquired plant of American Fertilizer Co. on Lathrop Ave. and will transfer machinery from Hutchinson Island plant.

Md., Baltimore—Hubbard Fertilizer Co. of Maryland, Keyser Bldg., capital \$10,000, incorporated by Wilbur W. Hubbard, Wesley D. Wilson and others.

Miss., Crystal Springs—Hazlehurst Oil Mill & Fertilizer Co. will erect plant.

Flour, Feed and Meal Mills

Okla., Oklahoma City—E. M. Scannell Grain Co., capital \$10,000, incorporated by E. M. and Joe Scannell and others.

Tenn., Harriman—Superior Milling Co., organized with B. C. Watkins, Pres.; C. Y. Blessing, Sec.; will erect meal and feed mill.

Tex., Lakeside—Farmers Elevator & Grain Co., capital \$25,000, incorporated by O. J. Winterman, C. P. Hoyo and others.

We Publish a Daily Bulletin of brief news items of business activities in the South and Southwest which open many Sales Opportunities.

You realize the advantage of being furnished every business day with authoritative information of industrial undertakings; engineering, construction and building operations, and State, County and municipal improvements in the entire South and Southwest. Dealers in Machinery and Equipment, Railroad and Contractors and Builders find this service thorough and invaluable. It gives you an opportunity to get in touch with firms when they are starting new venture or are expanding established enterprises, and therefore in many cases in the market for machinery, equipment or supplies at the time you read the news item.

May we send you a sample copy of the Daily Bulletin and complete information?

MANUFACTURERS RECORD

BALTIMORE, MD

Foundry and Machine Plants

Ala., Gadsden—Eureka Foundry Co., Evan J. Owen, Pres., N. 6th St., contemplates enlarging plant.

Gas and Oil Enterprises

Ala., Tusculumbia—Spring Valley Oil Co., \$15,000, incorporated by H. A. Pitts, R. L. Montgomery and W. V. Walker.

Ark., Little Rock—Little Rock Gas & Fuel Co. will erect gas meter station; construction begun.

Ark., Little Rock—Arkansas Natural Gas Co. will erect gas meter station; construction begun.

Ga., Columbia—Columbus Electric & Power Co. let following contracts for service building at Second Ave. and 18th St.: to W. C. Whitaker, for construction of service building; for plumbing to Walter Denson; for electric fixtures and wiring to Georgia Electric & Construction Co.; all of Columbus; entire cost, \$50,000.

Ky., Franklin—Star Oil Co., incorporated by C. E. Carlson, E. L. Reep and others.

N. C., Kinston—City, W. B. Coleman, Clk., will let franchise on Sept. 3 for constructing and operating gas plant, estimated population 12,000.

Okla., Cashion—Cashion Oil Co., capital \$10,000, incorporated by S. W. Hogan, N. E. Wagaman, both Cashion, E. L. Hogan, Reed-ing, Okla.

Okla., Muskogee—Elliott Oil & Gas Co., capital \$60,000, incorporated by Guy Cleaver, L. C. Parmenter and others.

Okla., Oklahoma City—Worley Oil Co., capital \$25,000, incorporated by G. E. Worley, H. L. Cooper and others.

Okla., Sapulpa—Sapulpa Gasoline Co., capital \$25,000, incorporated by W. M. Cowman, H. U. Bartlett, H. M. Watchern.

Okla., Tulsa—Pyramid Production Co., capital \$25,000, incorporated by D. C. Richardson, Jr., Valjean Biddison and others.

Okla., Yale—Fern Oil & Gas Co., capital \$100,000, incorporated by W. A. Dempsey, H. A. Dempsey and others.

Tex., Dallas—Fris Company-Lina-Utilities, capital \$50,000, incorporated by H. E. Bloomberg, E. J. Russell and others.

Tex., El Paso—J. S. Lancer Co., capital \$200,000, incorporated by J. S. Lancer, J. A. Hankerson and others.

Tex., Vernon—South Vernon Oil Co., capital \$40,000, incorporated by U. S. Davis, B. S. King and others.

Ice and Cold-Storage Plants

Ala., Parrish—Parrish Ice Co., capital \$15,000, incorporated by R. W. Herfurth, F. O. Bruce, R. W. Chambers.

Fla., Hollywood—Hollywood Ice Co., E. S. Beebe, Pres.-Mgr. (lately noted incorporated) will erect 45x60-ft. main building, 20x30-ft. garage building, concrete block, fireproof construction; open bids July 10; local contractors; has let contract to Arctic Ice Machine Co., Canton, Ohio, for installation of electric driven ice machinery; E. S. Beebe, Archt. (See Machinery Wanted—Pre-cooling Plant.)

Fla., Miami—Royal Palm Ice & Refrigerating Co. will erect plant addition, install freezing plant, condensers, tanks and boilers, machinery purchased; increasing capacity by 125 tons daily; J. C. Gault, Archt.

N. C., Salisbury—Citizens Ice & Coal Co., capital \$75,000, incorporated by C. C. Harris, O. V. Cooper, J. M. Waggoner.

Tex., Galveston—Details under Miscellaneous Enterprises.

Tex., Harlingen—Valley Electric & Ice Co.

acquired holdings of the Harlingen Ice Co.; will operate.

Iron and Steel Plants

W. Va., Wheeling—Wheeling Steel Co., incorporated with \$100,000,000 capital to operate iron mines, laboratory, produce gas and electric power; reported to have taken over Wheeling Steel & Iron Co., Labelle Iron Works, Whitaker-Glesner Co. and the Pitt Iron Co., of West Virginia.

Land Development

Fla., Miami—Belmar Co., Wm. I. Phillips, Pres., is developing 22½ acres of land on Biscayne Bay for homesite will expend about \$75,000 in improvements; will install electric system; sewer system; water works; roads and streets; erect dwellings, etc.; Watson & Garri, Supv. Engrs., Miami. (Lately noted.)

Fla., Ocala—Silver Springs South Beach, Inc., capital \$10,000, incorporated with H. A. Sennett, Pres.; James E. B. Hall, Sec.

Fla., Stuart—E. J. Ricou will develop citrus acreage and farming community on 640 acres; will issue \$65,000 bonds.

Fla., West Palm Beach—Details under Miscellaneous Construction.

Ky., Union—Pride Realty Co., capital \$15,000, incorporated by Tom Herrin, C. W. Moore and others.

Md., Baltimore—York Realty Co., 59 Knickerbocker Bldg., capital \$50,000, incorporated by Wm. H. Callahan, Jr., Alfred T. Edel and others.

Md., Baltimore—Lex-Fay Realty Co., corner Lexington and Howard St., capital \$250,000, incorporated by Herman Bernheimer, Leon Coblentz and Isadore L. Wolfe.

Miss., Jackson—Ed. S. Eckles of Memphis, Tenn. acquired 30 acres of land and will develop for subdivision.

Mo., Springfield—C. C. King Investment Co., capital \$10,000, incorporated by C. C. King, F. C. Mann and others.

Mo., St. Louis—Grand and Franklin Realty Co., capital \$100,000, incorporated by Wm. McKay, Joseph E. Truitt and others.

N. C., Sylva—Sylva Development Co., L. C. Hall, Pres.; H. W. Hoffman, Sec.; will develop 25 acres for homesite; will install electric lights; water works; sewer system; roads and streets; will also erect one eight apartment house, each apartment to contain 3 and 5 rooms; invites sketches and plans for apartments; will expend about \$25,000.

N. C., Winston-Salem—D. D. Smith interested in organization of company to develop 9300 acres at Hanging Rock for subdivision; will erect 5-story hotel; construct 200-acre lake on Indian Creek; 18 hole golf course with landing field for aeroplanes, automobile road; etc.; E. S. Draper, Landscape Archt. and City Planner, 11 5th St., Charlotte, N. C. (Lately noted.)

Tex., Fort Worth—American Land Co., incorporated by W. L. Willis, F. R. Wildman and others.

Tex., Houston—Holmes Land Co., capital \$10,000, incorporated by Frank H. Holmes, C. M. Flanagan and others.

Va., Roanoke—Barnett-Howerton-Showalter Corp., lately noted chartered with \$25,000 capital stock, M. L. Barnett, Pres., will develop 13 acres of land for subdivision; will install electric lights; water pipe line; gravel streets; concrete sidewalks, etc.

Lumber Enterprises

Ark., Ashdown—Walstein Lumber Co. has acquired 8000 acres hardwood timber from Fort Smith Wagon Co.; probably develop.

La., Winnfield—Mansfield Hardwood Lum-

ber Co. increased capital from \$300,000 to \$600,000.

Mississippi—Reynolds-West Lumber Co., J. W. Reynolds, Pres., Houston, Tex., has acquired timber tract from J. M. Griffin of Laurel, Miss.; included in purchase is model double mill at Burnside with daily capacity 15,000 ft.; plans erecting new hardwood mill and power plant; M. P. Barton of Deweyville, Tex., in charge.

Miss., Water—Valley Sawmill Co., capital \$10,000, incorporated by C. L. Frates, S. L. Pettigrew.

Mo., Kansas City—Baxter Lumber & Mercantile Co., capital \$12,000, incorporated by Norman Baxter, G. W. Ferguson and others.

Mining

Okla., Edith—Sante Fe Salt Co., has acquired 2000 acres salt deposits, has begun construction of plant having capacity 500 tons daily; new system of sprays and evaporation will be used; plant to be completed within six months.

Va., Moneta—Moneta Mineral & Mining Co. has feldspar deposits under development; contemplate constructing 3000 ft. spur track, standard gauge, and dam for turbines, install one mill unit complete, turbine, generator, hoists, conveyors, crushers, 70 lb. relay steel rails and accessories, and probably a few portable houses. (See Machinery Wanted—Steel Rails (Relay); Mining (Feldspar) Equipment, etc.)

Miscellaneous Construction

Ark., Jonesboro—Mortuary—W. B. Langford will erect mortuary on S. Main St., E. P. Wolpert, Archt.

Fla., West Palm Beach—Seawall—City, Geo. L. Wright, City Mgr., voted \$220,000 bonds, including \$100,000 for additional seawall on Lake Worth; \$30,000 for athletic field; \$25,000 for acquisition and extension of public park; \$25,000 to complete recently installed high pressure fire equipment; \$24,000 for completing new library; \$20,000 for incinerator; \$6000 for cleaning and clearing lots.

Fla., West Palm Beach—Canal—Harry S. Kelsey, Pres., East Coast Finance Corp., plans building drainage canal through Laxahatchee slough from West Palm Beach to Earman river, reclaiming approximately 100,000 acres land by both irrigation and drainage.

Ky., Owensboro—Dam—W. A. Wells, Government Engr., has been designated as Resident Engr. in charge of the construction of dam No. 46, located at foot of Hanning lane; has begun first work of building coffer dam, to extend 300 ft. into river and more than 1000 ft. in length; when completed the water will be pumped out and construction of locks and dams begun, will require 3 years to build; will also erect shops, warehouses and office buildings; Government will expend approximately \$3,500,000 on project. (Lately noted.)

La., Monroe—Levee—Tensas Basin Levee Board, J. W. Summerlin, Pres., contemplates expending \$100,000 on building levees along the Arkansas and Mississippi rivers for protection of northeast Louisiana Parish.

La., Shreveport—Caddo Levee Board will invite bids for widening of Twelve Mile bayou.

Md., Baltimore—Water Tank—Baltimore & Ohio R. R. Co., H. A. Lane, Chf. Engr., let contract to Chicago, Bridge & Iron Works, 608 S. Dearborne St., Chicago, Ill. at \$10,000 to construct steel water tank at Stewart and Beacon Sts.

S. C., Charleston—Pier—Port Utilities Com-

In writing to parties mentioned in this department it will be of advantage to all concerned if the Manufacturers Record is mentioned.

mission let contract to Raymond Concrete Pile Co., 140 Cedar St., New York at \$542,-806 to construct general cargo pier at Union wharf, foot of Market St.; to be built of concrete piling, designed for load of 250 lbs. per sq. ft. (Bids lately noted.)

Tex., Brownsville—Channel—John Jacobson of Galveston, Tex., has contract to construct 16 to 18 ft. channel to connect Pt. Isabel with the Gulf.

Tex., Galveston—Dredging—U. S. Engineer Office, will receive bids until Sept. 11 for dredging Sabine-Neches Waterways, Texas.

Tex., Houston—Canal—Lee H. Williamson, Asst. to Gen. George W. Goethals, Const. Engr. has begun surveys of the industrial possibilities of the Texas-Louisiana intra-coastal canal project.

Miscellaneous Enterprises

Ala., Cordova—Lime-Cola Bottling Co., capital \$15,000, incorporated by S. D. Kilgore, J. F. Barganier and A. R. Disney.

Ala., Mobile—Mobile Building Supplies Co. increased capital from \$100,000 to \$150,000.

Ark., Pine Bluff—Creamery—H. C. Couch and associates interested in establishing creamery.

D. C., Washington—Laboratory—Dept. of Interior, Washington, D. C., receives bids until Sept. 19 to erect pathological laboratory Freedmen's Hospital, Washington. Address The Sec. of The Interior.

Fla., South Jacksonville—Leesburg Fibre Pulp & Paper Co., Leesburg, Fla., Gilbert D. Leuch, Sec.-Treas., reported to erect paper manufacturing plant in South Jacksonville; main building will be 300x50 ft., other structures will be smaller; paper will be manufactured from fibre pulp produced at the Leesburg plant of the company; cost \$500,000.

Fla., West Palm Beach—Fire Equipment—Details under Miscellaneous Construction.

Georgia—National Gold Arsenic Corp., L. P. Jubien, Sec., Suite 2001, 25 West 43rd St., New York will erect plant, capable of producing 50,000,000 lbs. calcium arsenate annually.

Ga., Augusta—Atlantic States Warehouse Co., re-organized with J. P. Woodall, Pres.; C. W. Skinners, V.-P.

Ga., Rome—Paper Boxes—Fred Noble will establish plant for the manufacture of paper boxes, is moving plant from Cedartown.

Ky., Corbin—Vermillion & Heil Co., incorporated by L. F. Vermillion, Corbin; Theodore Hiel, Harlan, Ky., and others.

Ky., Louisville—Kentucky H. C. S. Co., capital \$25,000, incorporated by H. M. and G. W. Hoskins and others.

Ky., Louisville—Mendel-Weinstock Hat Co., capital \$50,000, incorporated by H. B. Kiefer, H. C. Hibbs, and others.

Ky., Mercer—T. H. Coleman & Son Co., capital \$25,000, incorporated by T. H. Coleman, T. H. Coleman, Jr., both Harrodsburg; R. E. Coke, Saldisa, Ky.

Ky., Poor Fork—Cumberland Drug Co. increased capital from \$10,000 to \$20,000.

La., Monroe—Magnolia Carbon Co., capital \$500,000, incorporated by O. M. Grisham, R. L. Kellogg, Travis Oliver.

La., Swartz—J. M. Huber Carbon Co. will rebuild plant burned at loss of \$15,000.

Md., Baltimore—M. Eichberg & Sons Co., Inc., 1812 Munsey Bldg., capital \$50,000, incorporated by Leo Eichberg, Charles B. Baker and Raphael Walter.

Md., Cumberland—Speelman-Couch Ice Cream Co., Inc., capital \$25,000, chartered by George W. Couch, Edwin W. Wells, James P. McClurg.

Miss., Durant—News Printing Co., incorporated by R. U. Galloway, R. A. Povall and others of Lexington, Miss.

Miss., Gulfport—Lawler-Navek Manufacturing Co. (lately noted incorporated, capital \$60,000) will consider building later; will manufacture novelties, aluminum grocers scoops, etc.; open bids Sept. 1 on machines of drilling, stamping and polishing aluminum products, jigs, etc. Address Chas. E. Navek, Const. Engr.

Miss., Jackson—Magnolia Ice Cream Co., incorporated by J. L. Blackwell, Walter M. Wright and others.

Mo., Gallatin—Everman Stock & Poultry Farm Remedy Co., capital \$50,000, incorporated by J. W. Everman, D. D. Patterson and others.

Mo., Kansas City—Bindery Products Co., capital \$10,000, incorporated by I. F. Mosher, Lillian E. Bayless and others.

Mo., St. Louis—Garland Products Co., capital \$25,000, incorporated by C. H. Berry, J. J. Garland and others; will manufacture lubrication, kar-kleen, and other products.

Mo., St. Louis—Mutual Paint Manufacturing Co., capital \$40,000, incorporated by W. C. and J. J. Schmidt and others.

Mo., St. Louis—Grand-Lucas Drug Co., capital \$10,000, incorporated by H. E. Johannes, Samuel Lewis and others.

Mo., St. Louis—Mae Manufacturing Co., capital \$20,000, incorporated by Mae Frelich, A. L. Wood and others; will manufacture wearing apparel.

Mo., St. Louis—Balthasar Architectural & Building Co., incorporated by H. G. Balthasar, H. F. Hahn and others.

Mo., St. Louis—Valley Check Service, Inc., capital \$12,000, incorporated by G. E. Dillingham, R. M. Johnston and others; printing, publishing, etc.

Mo., St. Louis—Brockland & Moore, Inc., capital \$25,000, incorporated by J. F. Brockland, W. R. Moore and others.

Mo., St. Louis—H. Siegfried & Sons, Inc., capital \$100,000, incorporated by Harry and Isidore Siegfried and others.

Mo., St. Louis—Parker Unit System, Inc., capital \$100,000, incorporated by R. H. Bailey, E. H. Hall and others.

Mo., St. Louis—National Lead Co., 111 Broadway, New York, acquired National Pigments & Chemical Co.'s plant.

N. C., Charlotte—Vaughn Economy Switch Co., capital \$250,000, incorporated by T. L. Vaughn, Jr., Winston-Salem; Wm. J. Cooper and H. P. Garmon, both Charlotte.

N. C., Charlotte—Carolina Baking Co., Herbert O. Miller, Pres., has site at S. Tyron; front of pressed brick with terra cotta trimmings, plate glass fronts; cost \$100,000; W. M. McCormick & Co., Archt., New York.

N. C., Durham—Star Bakery, Mallie J. Paschall, Propr., will erect 1-story brick bakery plant at Roney and Proctor Sts.

N. C., Fayetteville—Cumberland Printing Co., capital \$25,000, incorporated by T. A. Lyon, Fayetteville, W. G. Birkhead, Wilmington, N. C., and others.

N. C., Rutherfordton—The Logan Garment Co., Eva Logan, Sec.-Treas. and Mgr. (lately noted incorporated, capital \$150,000) has building, will install electric sewing, cutting, hemstitching, button sewing and button hole machines; will manufacture children's gingham dresses. (See Machinery Wanted—Sewing (Electric) Machines, etc.)

Okla., Blackwell—Deer Creek Elevator Co., capital \$20,000, incorporated by T. C. Stout, F. E. Martin and others.

Okla., Enid—Furnas and Rogers Co., capi-

tal \$15,000, incorporated by L. M. Furnas, R. M. Rogers and others.

Okla., Muskogee—Griffin Wholesale Co., 327 S. Cherokee St., J. T. Griffin, Pres., will erect \$100,000 plant.

Okla., Okmulgee—Creek Hotel Co. increased capital from \$500,000 to \$750,000.

S. C., Due West—Due West Community Club, Dr. H. P. Price, Pres., interested in establishment of hatchery of 10,000 capacity.

S. C., Laurens—Piedmont Poultry Farm, capital \$20,000, incorporated with H. W. Burbick, Pres.; W. R. McCuen, Sec.-Treas.

S. C., Rockhill—Pryor Electric Co., incorporated with J. A. Pryor, Pres.; L. H. Phillips, Sec.

Tenn., Chattanooga—Dixie Consolidated Graphite Co., of Birmingham, Ala., C. E. Watson, Pres., plans erecting plant for the manufacture of flake graphite into salable finished product; the company wires Manufacturers Record: "Company capitalized at \$1,500,000; will erect 15,000-lb. daily capacity plant; building and equipment cost about \$250,000."

Tenn., Memphis—T. H. Bobbitt and Co. will erect building for Memphis Linotype Co., S. E. corner Jefferson Ave. and Third St.; 2 stories; concrete, steel and brick; cost \$45,000.

Tenn., Nashville—Western Electric Co. reported to have acquired 15 acre site for the erection of creosoting plant.

Tex., Beaumont—Chain Battery System, incorporated by Dan Dennett, H. Tate and others.

Tex., Big Springs—J. B. Hodges acquired J. Athans cleaning and dyeing works; John Hodges, Jr., Mgr.

Tex., Dallas—Texas Corrugated Box Co., capital \$110,000, incorporated by Julius H. Oppenheim, Lynn B. Milan and others. (Lately noted.)

Tex., Dallas—Brannon's Dyeing & Dry Cleaning Co., 4310 Elm St., V. J. Brannon, Pres., let contract to Hughes O'Rorik Const. Co., Preatorian Bldg., Dallas, to erect 74x143 ft.; mill construction; H. A. Overbeck, Melba Theatre Bldg., Dallas, Archt. (Lately noted.)

Tex., Eagle Pass—W. W. Taylor and Tom Mays organizing company to establish mattress plant.

Tex., Galveston—The Galveston County Milk Dealers Assn., Horace Harvey, Jr., Business Mgr., of Arcadia, plans erecting central milk station with refrigerating plant.

Tex., Plainview—Plainview Sanatorium, capital \$10,000, incorporated by J. L. Guest, E. O. Nichols and others.

Va., Big Stone Gap—Merchants Beverage Corp., incorporated with E. M. Gilly, Pres.; C. M. Daugherty, Sec.; has plant with daily output of 1600 doz. bottles. (Lately noted.)

Va., Hampton—Contracting—A. R. Masters Co., Inc., capital \$50,000, chartered with A. R. Masters, Pres.; F. H. Lake, Sec.

Va., Martinsville—Ford Overall Co., Inc., capital \$50,000, chartered with A. R. Mich-ton, Pres.; Isadore Reichmann, Sec.

Va., Newport News—Reproducto Manufacturing Corp., capital \$35,000, incorporated with R. H. Brown, Pres.; E. H. Hurd, Sec.

Va., Norfolk—Ballard Fish & Oyster Co. and the Wainwright-Ayers-Carroll Co., Inc., will expend \$100,000 in improvements to waterfront along Scott's Creek.

W. Va., Follansbee—Jefferson Glass Co., C. H. Blumenauer, Pres., Wheeling, W. Va., and Jefferson Co., have consolidated; will enlarge plant.

In writing to parties mentioned in this department it will be of advantage to all concerned if the Manufacturers Record is mentioned.

Motor Cars, Garages, Tires, Etc.

Ark., Texarkana—Liddell Motor Co., will erect building corner 3rd and Elm Sts.

Fla., Buena Vista, Sta., Miami—Garage, etc.—Freeman & Sons, Inc., capital \$100,000, chartered with H. L. Freeman, R. D. Freeman, Sec.

Fla., Dade City—Dade City Motor Co. let contract to Stanley & Spencer, of Dade City, to erect 60x30-ft. brick addition; estimated cost \$10,000.

Fla., Haines City—Garage—O. Kaeser let contract to Bowen & Wadsworth to erect 2 story garage building, cement and hollow tile construction.

Fla., Tampa—Bay Shore Filling Station, G. L. Simmons, Pres.-Mgr., Barcelona St. and Bay Shore Blvd., will erect 40x40-ft. fireproof filling station and drug store; estimated cost \$10,000; open bids about Oct. 1; F. J. Kennard, Archt., Krause Bldg. (Lately noted incorporated, capital \$25,000.)

Fla., Tampa—Hulsey Automobile Agency, Inc., let contract to Logan Bros., Tampa, to erect 2 story, 105.8x151-ft. building, skeleton steel and brick; estimated cost \$55,000; R. B. Gambrier, Archt., Tampa.

Ky., Lexington—Kentucky Filling Station, capital \$10,000, incorporated by John U. Field, A. S. Stokely and others.

Ky., Lexington—Oil Products Co., Inc., 5th and Jefferson Sts., Stanhope Wiedman, Pres.-Mgr., Box 473, will erect 25x35-ft. office building, 25x50-ft. warehouse, mill construction, bids open; will install 3000 gal. capacity gasoline and kerosene rotary pumps, four 12,000 gal. gasoline tanks, invite bids. (See Machinery Wanted—Pumps (Rotary); Tanks (Gasoline).)

Ky., Louisville—Young & Baubey Motor Co., incorporated by Geo. L. Baubey, L. B. Young and others.

Md., Baltimore—Toursedan Corp., 104 W. Mt. Royal Ave., capital \$200,000, chartered by Merrill Waide, Wm. Heinze and others.

Md., Baltimore—Garage, etc.—Economy Coal Co., Inc., will erect service building, office and garage at 25th and Aisquith Sts., costing \$24,000.

Mo., Joplin—Filling Station—Standard Oil Co. let contract to W. R. McCormick to erect filling station at corner 32nd and Main Sts.

Mo., Kansas City—Hochstadter Motor Co., incorporated by L. M. Hochstadter, L. E. Olin and others.

Mo., Kansas City—Sterling Gasoline Corp., capital \$40,000, chartered by C. James, O. R. Worley and others.

Mo., St. Louis—Thorman Tire Corp., capital \$10,000, incorporated by H. M. Gilman, P. H. Reis and others.

Mo., St. Louis—Owen-Baskett Motor Co., capital \$50,000, incorporated by Wm. H. Owen, Thomas H. Baskett and others.

Mo., St. Louis—Automobile Accessories—Koechook Co., Inc., capital \$25,000, incorporated by Wm. Jaeger, J. M. Griffin and others.

Mo., St. Louis—Mills Motor Co., Inc., capital \$50,000, incorporated by Harry Andrae, Vincent Vachlavik and others.

N. C., Charlotte—Colonial Motor Co., capital \$100,000, incorporated by W. M. Wilkes, C. W. Kelly and others.

N. C., Greenville—C. R. Sutton Auto Co., capital \$50,000, incorporated by T. R. Sutton, W. R. Payne, James A. Hodges, all of Greensboro, N. C.

N. C., High Point—T. and S. Motor Co.,

capital \$50,000, incorporated by W. L. Stam-ey, W. M. Thacker and others.

S. C., Cowpens—Cowpens Motor Co., capital \$10,000, incorporated with T. F. Webster, Pres.-Treas.; C. M. Simms, Sec.

S. C., Greenville—Garage, etc.—C. O. Allen let contract to Potter & Shackelford, Inc., Greenville; to erect 3 story, 60x116-ft. garage and show rooms, reinforced concrete and brick construction; J. E. Sirrine & Co., Engrs., Greenville.

Tenn., Memphis—Memphis Gasoline Co., capital \$10,000, incorporated by R. E. Kennedy, Joe Groskind and others.

Tenn., Memphis—Automobiles—Graham-Merrin Co. will occupy 2-story brick structure at 291 Union Ave.; \$50,000; will be constructed by F. J. Ozanne & Co.; Julius Goodman and M. B. Herman, owners; E. L. Harrison, Archt.

Tex., Austin—Filling Station—Producers Refining Co. of Fort Worth will erect brick gasoline filling station at East 14th and Red River.

Tex., Fort Worth—Pee Wee System, Frank J. Hart, local Mgr., will establish plant at 400 Ballinger St., having 12,500 sq. ft. floor space; install facilities for baking enamel on automobiles.

Tex., Houston—Garage—C. M. Scholl will erect \$8500 brick garage building on Garrett St.

Tex., Lockhart—Jones Motor Co., incorporated by C. E. Jones, Holland Page and others.

Tex., San Antonio—Garage—Frank G. Newton will erect -story, reinforced concrete and cut-stone garage building on N. Flores St.; Herbert S. Green, Archt.

Tex., Sherman—Filling Station—Magnolia Petroleum Co. let contract to Allmon, Young and Wood, to erect gasoline and oil filling station at Lamar and Walnut Sts.

Railways

Mo., Springfield—D. J. Landers and John T. Woodruff, of Springfield, are reported interested in an effort to secure the extension of a short line railroad from a connection with the Frisco system at Mountain Grove, Mo., to develop timber land.

Road and Street Construction

Ala., Albany—City let contract to Independent Paving Co., Birmingham, at \$59,337.12, for paving Sixth and Seventh Aves. west, Eighth Ave., Johnston and Jackson Sts. (Lately noted.)

Ala., Birmingham—Jefferson County will repair the Majestic road; will also repair the Docena road. Address the County Comms.

Ala., Birmingham—Jefferson County let contract to Southern Road Co., Birmingham at \$41,900 for repairing road between West End and Powderly, part asphalt.

Ala., Birmingham—City let contracts for paving sections of Forty-eighth St., Ninth Court Alley, South, Lone, McPoland, Thirty-Fourth, Norwood, and Seventh St., West and Fourth Ave., Tenth Ave., Alabama Ave., Fifteenth Ave., Vanderbilt Road, Sixteenth, and Seventeenth Sts., Southwest, at \$21,503.80. (Lately noted.)

Ala., Jasper—Walker County Comms. plan building a hard surface road to Oakman via Parrish. Address County Comms.

Ala., Montgomery—Montgomery County will receive bids until Sept. 10 for grading and graveling of the extension of Fairview Ave., from Cleveland Ave. to Mobile road. Address Thos H. Edwards, County Engr.

Ala., Tuscaloosa—City let contract to the Finner & Toolhaker Co., Tuscaloosa for approximately 1 mi. paving.

Ark., Fort Smith—City let contract to Otto V. Martin Construction Co., Fort Smith, Ark., at \$26,064.90 for laying pavement, curb and gutters in paving District No. 19, at \$25.884 for Paving District No. 23 and at \$7317.42 for paving in District No. 25. (Lately noted.)

D. C., Washington—City Comms. will receive bids until August 31 for laying of walks and driveway through grounds of New Eastern High School. Address Comms., Room 509, District Building, Washington, D. C.

Fla., Lake Butler—Union County contemplates improving road to connect with the Macclenny road at Sapps Station through Raford, Johnstown, Lake Butler, Dukes and Worthington; will probably vote on bond issue. Address County Comms.

Fla., Miami—Details under Land Developments.

Fla., Panama City—Bay County plans building roads; voted \$140,000 bond issue. Address County Comms.

Fla., Tampa—City let contract for paving Lake, Tampania and Branch Aves., to Cone Bros. at \$19,392.91 and Nordica Ave. to W. L. Harwell at \$6461.

Ga., Atlanta—City plans expending several million dollars in improving streets and are receiving bids 1st and 3rd Mondays of each month. Wm. Hansell, City Purchasing Agent, Atlanta, Ga., portion of streets to be paved are as follows:

Ashby St. from Oglethorpe to White, with Willite, cost \$13,106; Ashby from Gordon to Oglethorpe, with Willite, cost \$9631; Atlanta Ave. from Cherokee to South Boulevard, cost \$17,438; Atlanta Ave. from Cherokee to Capitol Ave., with concrete, cost \$49,581;

Atlanta Ave. from Boulevard to Confederate, cost \$9964; Bates from Boulevard-DeKalb to street Railway, \$3843; Barnes, from Fourteenth to Sixteenth, cost \$8406; Beecher, from Ashby to Lawton, with Willite, cost \$17,544; Brenwood, from Emerson to Ormewood, cost \$11,027; Boulevard circle from Boulevard to Greenwood, cost \$7386;

Crew from Georgia Ave to Weyman, with concrete, cost \$43,176; Fraser, from Georgia to Ormewood, cost \$13,678; Fraser from Woodward to Fair, cost \$1737; Fern from Haygood to Venira, concrete, cost \$6521; Garnett, from Forsyth to Central, cost \$8933;

Greenwood from Highland to Barnett, with Willite, cost \$12,147; Hopkins, from Greenwood to L. & N. tracks, cost \$6461; Highland from Highland View to Virginia, cost \$9461; Hardendorf, from McLendon to Druid Hills, cost \$22,508; Hardee, from Moreland to Flora, concrete, cost \$10,906; Indiana, from Arizona to Connecticut, cost \$3553; Johnson, from Boulevard to Randolph, with Willite, cost \$8028; Josephine from DeKalb McLendon, cost \$3133; Kelley, from Glenwood to East Fair, cost \$19,336; Linden, from Piedmont to Bedford, cost \$11,214; Los Angeles, from Pennsylvania to Maryland, with concrete, cost \$2431;

Mathews, from Ashby to Peoples, with Willite, cost \$8295; McLendon, from Clifton to Sutherland, with concrete, cost \$21,052; Newport from Simpson to Jett, with Willite, cost \$5241; Peoples, from Gordon to White, cost \$18,816; Palmetto, from Ashby to Peoples, with concrete, cost \$5987; Parson, from Ashby to Peoples, with concrete, cost \$5987;

Richardson, from Capitol to Connally, cost \$12,610; Richardson, from McDaniel to Pryor, cost \$20,724; Racine drive, from Greens Ferry, to Mosley, cost \$9747; Rich-

In writing to parties mentioned in this department it will be of advantage to all concerned if the Manufacturers Record is mentioned.

mond, from Fraser to Martin, cost \$3651; Spruce from Edgewood to Dixie, cost \$4306; Stokes, from Gordon to Ontario, cost \$9805; Waverly Way, from Edgewood to Euclid, cost \$20,490; Whitehall terrace, from Whitehall to Richardson, cost \$8878. Councilman Claude L. Ashley, Chmn. of the Streets Comm.

Ga., Fort Valley—City let contract to J. E. Whitley, La Grange, at approximately \$72,000 for paving with bibrolithic concrete and granite curbing. (Lately noted.)

Ky., Ashland—City let contract to Hunt-Forbes Construction Co., Ashland at \$75,000 for paving Blackwood street extending from the South Ashland fire station toward the old Ferguson Farm. (Lately noted.)

Ky., New Albany—City plans improving street connecting with Corydon Pike and the Dixie Highway; also plans improving West Main St. from the end of brick street at West Tenth St. to the city limits. Address Mayor Robert W. Morris.

La., Abbeville—Vermillion Parish let contract to Morgan & Cady at \$31,360.66 to build 11.5 mi. gravel road, in Ward No. 3. Project No. 1, 3, 6, 8 and 10. (Lately noted.)

La., Abbeville—Vermillion Parish will receive bids until September 18 for grading, draining, culverts, bridges and gravel surfacing of approximately 2.1 mi. road in the Ninth ward of Vermillion Parish, route 3, beginning just east of Ovey Sellers' residence north to Hebert Bros. store. Jos. E. Broussard, Pres., Police Jury and Rom P. Leblanc, Sec.

La., Leesville—Vernon Parish plans improving Beauregard road; voted \$800,000 bond issue plans building road connecting Fullerton and Leesville; also one running north and south through Leesville from the Beauregard parish line near Ludington to the Natchitoches Parish line and one running east and west from the Rapides parish to the Sabine River; will vote in near future on \$500,000 bond issue. Address Police Judge.

Md., Baltimore—State Roads Comm., 601 Garrett Building, Baltimore, Md., let contracts for building two roads in Anne Arundel County as follows:

2 mi. road in first district to Taylor and Trueman, of Sollers, Calvert County; 2 mi. in Seventh District to Thomas Mullan, 3945 Greenmount Ave., Baltimore, Md.

Miss., Grenada—Board of Supervisors let contract to J. R. Stroudy, Okolona, Miss., at \$115,940.97 for building 16 mi. gravel road running from the corporate limits Grenada westward through Dubard, Holcomb, Doxbury to the Tallahatchie County line.

Miss., Meridan—Lauderdale Board of Supervisors let contract to T. K. Blahk, Meridan at \$50,530 for building 4.7 mi. graveled highway between Meridan and Butler known as Bienville road.

Mo., Jefferson City—Missouri Highway Comm. plans grading, excavating and constructing drainage structures on 26 roads as follows:

Atchison County, 3 sections, 5 mi. 34 ft. road from Tarkio West and South, State Project, Route 1, Sec. 6 and 5 mi. 34 ft. road from Rockport east, State Project, Route 1, Section 5, and 5 mi. 34 ft. road from Tarkio South, State Project Route 61, Sec. 4; Carroll County, 2 sections, 5 mi. 34 ft. road from Carrollton West, State Project, Route 10, Sec. 18 and 5 mi. 34 ft. road from Carrollton West, State Project, Route 10, Sec. 19; Cass County, 5 mi. 30 ft. road from Belton to Harrisonville, State Project, Route 35; DeKalb County, 5 mi. 34 ft. road from Union Star to Clarks-

dale, State Project, Route 31, Sec. 2; Douglas County, 5 mi. 30 ft. road from Ava to Gainesville, State Project, Route 5, Sec. 91; Gasconade County, 5 mi. 34 ft. road from Mt. Sterling to Rosebud, State Project, Route 12, Sec. 43; Holt County, 5 mi. 34 ft. road from Oregon to Savannah, State Project, Route 1, Sec. 19; Jackson County, 5 mi. 34 ft. road from Sni-Bar-Leeds to Blue Ridge, State Project, Route 2, Sec. 2; Lafayette County, 5 mi. 30 ft. road from Lexington Bridge approaches, State Project, Route 13, Sec. 16; Madison County, 5 mi. 34 ft. road from ½ mi. St. Francis to Patton, State Project, Route 70, Sec. 5; Marion County, 5 mi. 34 ft. road from Hannibal West, State Project, Route 8, Sec. 70; Mercer County, 2 sections, 5 mi. 30 ft. road from Princeton to Mercer, State Project Route 33, Sec. 4, and 5 mi. 30 ft. road from Princeton to Mercer, State Project, Route 3, Sec. 3; Mississippi County, 4 mi. 34 ft. road from Prairie West, State Project, Route 55A, Sec. 1; Newton County, 2 sections, 5 mi. 30 ft. road from Granby East, State Project, Route 16, Sec. 7, and 5 mi. 30 ft. road from Granby East, State Project, Route 16, Sec. 9; Pettis County, 5 mi. 34 ft. road from Dresden to Warrensburg, State Project, Route 12, Sec. 12; Putman County, 5 mi. 30 ft. road from Unionville North, State Project, Route 5, Sec. 1; Ray County, 2 sections, 5 mi. 30 ft. road from Richmond South, State Project 13, Sec. 14, 5 mi. 30 ft. road from Richmond South, State Project, Route 13, Sec. 15; St. Louis County, 5 mi. 30 ft. road from St. Louis to Manchester, State Project, Route 14, Sec. 85; Worth County, 2 sections, 5 mi. 30 ft. road from Iowa State line South, State Project, Route 29, Sec. 1, 5 mi. 30 ft. road from Iowa State line South, State Project Route 29, Sec. 2. B. H. Piepmeyer, Chief Engr., Jefferson City, Mo.

N. C., Greensboro—City will receive bids until August 31 for paving approximately 4900 sq. yds. concrete sidewalks; contracts No. S-1, S-2, and S-3; P. C. Painter, City Manager and G. E. Finck, Highways Engr.

N. C., Raleigh—City contemplates expending \$750,000 to \$1,000,000 for street improvements, \$175,000 for water lines, \$100,000 for sewers; \$75,000 for curbs and gutters; will probably vote on \$1,250,000 bond issue. Mayor Eugene E. Culbreth.

N. C., Sylva—Details under Land Developments.

Okl., Picher—City plans paving sidewalk from the city hall west on Third St. to Columbus Ave. on the North side of the street. Address The Mayor.

S. C., Seneca—City let contract to Ballenger Paving Co., Greenville, S. C., at \$40,000, for paving with concrete in business section of city. (Lately noted.)

Tenn., Chattanooga—City will widen Cherry St. from Ninth to Fourth St. Address The Mayor.

Tenn., Greenfield—Details under Sewer Construction.

Tenn., Greenville—City let contract to Stacey Brothers, Augusta, Ga., at approximately \$150,000 for street paving. (Lately Noted.)

Tenn., Pulaski—City let contract to E. T. Lewis, Nashville, Tenn. at approximately \$18,000 for paving public square with rock asphalt surface. (Lately noted.)

Tex., Alpine—Brewster County will receive bids until Sept. 20 for 2 road projects as follows: For building 15.7 mi. State Highway No. 12 from Alpine to Altuda; building 8.53 mi. State Highway No. 12 from Alpine to the Jeff Davis County line; A. L.

White, County Engr. and M. S. Burke, County Judge.

Tex., Amarillo—Potter County plans building 6 mi. 16-ft. gravel road on State Highway No. 33; estimated cost \$75,000; O. A. Seward, County Engr., Amarillo, and Sam B. Matlow, County Judge.

Tex., Angleton—Secretary of Agriculture, U. S. Bureau of Public Roads, Washington, D. C., plans for Federal Aid Project No. 367, 17.24 mi. 16-ft. sheet road on the Houston-Angleton Highway, State Highway No. 19, extending south from the Fort Bend County line through Road District No. 16 of Brazoria County; estimated cost \$260,000; Federal Aid \$30,000; H. W. Minson, Jr., Engr., Road District No. 16 and J. L. Loggins, County Judge, Angleton, Tex.

Tex., Baird—Callahan County, Road District No. 1 plans completing section of the Bankhead highway from the Eastland to the Taylor County line; will vote on Sept. 15 on \$200,000 bond issue. Address County Judge.

Tex., Bonham—Fannin County will receive bids until September 15 for building 1 mi. 18-ft. concrete pavement through Honey Grove; estimated cost \$35,000; Sam E. Nelson, County Judge and Pickney B. Price, County Engr., Honey Grove, Tex.

Tex., Carrizo Springs—Dimmit County plans building roads; one from Maverick County across Dimmit to Dilley to connect with the San Antonio-Laredo highway; voted \$234,000 bond issue.

Tex., Coleman—Coleman County plans building State Highway and lateral roads; Precinct No. 4 will vote on September 2 on bond issue of \$200,000 to build highway between Coleman and the Taylor County line; W. E. Dickerson, County Engr., and S. J. Pieratt, County Judge, Coleman.

Tex., Dallas—City plans widening Harwood St. from Main to Bryan St.; estimated cost \$400,000. Address Mayor Blaylock.

Tex., Dallas—City plans street improvements; City Comm. voted \$521,000 improvement budget. Address Chairman, City Comm.

Tex., Falfurrias—Brooks County plans building 10.08 mi. 18 ft. gravel surfaced road on State Highway No. 12, Federal Aid Project No. 278; estimated cost \$131,254; U. S. District Engineer, Fort Worth, approved plans. H. A. Peabody, County Engr. and J. T. Brooks, County Judge, Falfurrias, Tex.

Tex., Fort Worth—City will pave Irma St. from New York to Evans Ave., Illinois Ave. from Humboldt to White Sts. and Lee St. from Magnolia Ave. to Myrtle St. Address the Mayor.

Tex., Franklin—Robertson County plans building 15 mi. Meridian Highway in Road District No. 2, between Hearne and the Brazos County line; estimated cost \$175,000; L. A. Peterman, Engr., Road District No. 2, Hearne, Tex., and Joe Reid, County Judge, Robertson County.

Tex., Greenville—City will receive bids until September 1 for street improvements in District No. 40 and 42, with brick or gravel. J. O. Willman, City Clerk.

Tex., Houston—City will receive bids for paving of Waugh Drive (a new street to be opened); estimated cost \$100,000. City Engr. J. C. McVea.

Tex., Jasper—Jasper County plans building 6 mi. 16-ft. gravel road on State Highway No. 45 from Jasper to the Town Bluff Road; estimated cost \$60,000; Sec. of Agriculture, U. S. Bureau of Public Roads, Washington, D. C., approved plans; Federal Aid \$30,000; plans surfacing 7.9 mi. State Highway No. 7 between Jasper and the Angelina County line, approximate cost \$50,000; A. D.

Hancock, County Judge, Jasper, Tex., and C. P. Hunter, County Engr., Jasper, Tex.

Tex., La Grange—Fayette County plans building 14 mi. State Highway No. 3-D between La Grange and the Colorado County line; estimated cost \$150,000; Capt. A. Schlafe, Engr., County and J. P. Ehlinger, County Judge, La Grange.

Tex., Leakey—Real County plans building 17.8 mi. Kerrville-Rock Springs Highway; estimated cost \$70,000; W. E. Simpson Co., County Engineers, National Bank of Commerce Building, San Antonio and J. L. Youngblood, County Judge, Leakey, Tex.

Tex., Madisonville—Madison County plans building State Highway No. 21; will vote September 15 on \$150,000 bond issue. F. Ferguson, County Judge, Commrs. Court. (Lately Noted.)

Tex., Marlin—Falls County will receive bids until September 18 for building 6.98 mi. gravel surfaced road on State Highway No. 44 extending through the town of Lott; J. P. Wehrung, County Engr., Lott, Tex., and Walter S. Hunnicutt, County Judge.

Tex., Mt. Pleasant—Titus County will receive bids until Sept. 21 (tentative) for building 4.13 mi. gravel surfaced road on State Highway No. 1-A; estimated cost \$60,000; H. S. Wilder, County Engr. and Dav M. Cook, County Judge, Mt. Pleasant, Tex.

Tex., Newton—Newton County will receive bids until September 12 for building 20.94 mi. highway No. 7. Address J. C. Ramsey, County Judge, Newton, and State Highway Dept., Austin, Tex.

Tex., Palo Pinto—Palo Pinto County plans building 3.37 mi. 18 ft. bituminous macadam pavement on the Bankhead Highway; U. S. District Engineer, Fort Worth approved plans; estimated cost \$60,254; G. W. Courter, County Engr. and E. L. Pitts, County Judge, Palo Pinto, Tex.

Tex., Pearsell—Frio County, Road District No. 4, plans building hard surfaced road between the Meridian Highway at Delley and extending to the County line to connect with the proposed Carrizo Springs-Eagle Pass Highway; will vote September 18 on \$65,000 bond issue. Address J. C. Pranglin, County Judge.

Tex., Pecos—Reeves County plans building 15.5 mi. 18 ft. gravel road on the Old Spanish Trail Highway, Federal Aid Project No. 408, extending from the intersection of State Highway No. 1 to Toyahvale; estimated cost \$100,040; Federal Aid \$10,128.25; Secretary of Agriculture, U. S. Bureau of Public Roads, Washington, D. C. approved plans; A. J. Adcock, Res. Engr., Balmorhea and J. F. Ross, County Judge, Pecos.

Tex., Sierra Blanca—Hudspeth County will receive bids until latter part of September for building of 9 mi. State Highway No. 1, including grading and constructing of drainage structures; J. M. Walling, County Judge and J. W. Carter, County Engr., Courthouse, El Paso, Tex.

Tex., Sulphur Springs—District No. 8 plans building road from the Hopkins County line on the east to the Hunt County boundary by way of Sulphur Springs, Cumby and Brasher; voted \$550,000 bond issue. Address Chairman.

Tex., Waxahachie—Ellis County plans building 3 mi. gravel surface on State Highway No. 14 from point 1 mi. north of Palmer to point 2 mi. south of Palmer; estimated cost \$30,000; W. A. Spalding, Engr. and H. R. Stovall, County Judge, Waxahachie, Tex.

Va., Petersburg—City Council appropriated \$9000 for paving of East Bank St. from Sycamore to Madison St. with asphalt, also appropriated \$140,000 for paving Washington St. from Adams West to the Corporation

limits, Sycamore St. from Bollingbrook to Wythe and Adams St. from Franklin to Wythe.

Va., Portsmouth—Norfolk County will receive bids until September 5 for 2 road projects as follows:

For laying permanent surface on Rodman Ave. between King St. and the Hodges Ferry road, Westhaven, and concrete surface on the Sewalls Point road from Norview station to the Waterworks road. Address R. B. Preston, Road Engr., Comm. of Roads and Bridges, Room 414 New Kirm Building, Portsmouth, Va.

Va., Richmond—State Highway Comm. received low bids on 4 road projects as follows:

Project S-328, Route 39, 1.8 mi. road, Phoebus to Buckroe, in Elizabeth City County, Annaway Hudgins Co., Hampton, at \$46,367.45; Project 263, Route 114, 8.7 mi. grading and drainage road between Haysl and Moss in Dickerson County, McArthur and Hood, Huntington, W. Va., at \$265,248.99; Project 276-A, Route 39, 6.27 mi. road between Louisa and Albemarle Counties, H. H. George, Jr., of Richmond, \$339,772.49; Project F-22, Campbell County, C. B. Hester, Greensboro, N. C.; H. G. Shirley, Chmn. Highway Comm.

Va., Roanoke—Details under Land Developments.

W. Va., Clarksburg—Harrison County will receive bids until Sept. 10 for 3 sections of roads as follows:

Grading and surfacing with concrete, 1 mi. of road beginning at the end of the improved road near Bridgeport and leading towards Boothville in Simpson District; grading and placing drainage structures on approximately 4 mi. road beginning near Laura Lee and extending to the Sardis District line in Eagle District; grading and surfacing with macadam approximately 1.5 mi. of road beginning at end of the concrete pavement on Mudlick Run and extending to a point near Adamsville in Clay District; Clair N. Parrish, Clerk, County Court of Harrison County, Clarksburg, W. Va.

W. Va., Fayetteville—Fayette County let contracts for 3 road projects as follows:

Fayetteville District, 2 sections of road from Mt. Hope to Pax to Fidelity Construction Co., Mt. Hope; Fayetteville-Cunrad road to Waugh Bros.; Quinnimont District, grading and draining the road from Quinnimont to Hemlock to Waugh Bros., approximate cost of projects \$210,000.

W. Va., Fayetteville—Fayette County Court will receive bids in near future for the paving of 4 mi. road from Montgomery to Mt. Carbon; a 16-ft. road is contemplated. Address County Commrs.

Sewer Construction

Ark., Fayetteville—City, Alan Wilson, Mayor, will enlarge sewer system.

Ala., Tuscaloosa—D. B. Robertson, Pres. Board of Commrs., opens bids Sept. 4 to construct storm water sewer; approximately 375 lin. ft. of 12-in., 535 lin. ft. of 15-in., 45 lin. ft. of 18-in. terra cotta pipe; 2 manholes; 6 inlets; W. H. Nicol, City Engr.

Ark., Mc Gehee—City let contract at \$85,306 to Merkle Machinery & Construction Co. to construct sanitary sewer system. (Lately noted.)

D. C., Washington—Washington Suburban Sanitary Comsn., Evans Bldg., New York Ave., receives bids until Sept. 14 to construct 16,500 ft. of 6 to 18 inch sewers and appurtenances; contract No. 37-S; plans on file with Robt. B. Morse, Ch. Engr. of Dist., Hyattsville, Md.

Fla., Miami—Details under Land Developments.

Fla., Miami—City let contract at \$66,594 to John J. Quinn Co., Miami, to construct storm sewer No. 60. (Lately noted.)

Fla., St. Petersburg—Director of Finance, H. T. Davis, receives bids until Sept. 24 to construct sanitary sewer; approximately 138,610 ft. of 6 to 21-in. sewer pipe, 395 manholes. (Lately noted.)

La., Monroe—City let contract at \$94,000 to McIntosh Co., Oklahoma City, Okla., to constr. 11 miles of sewers in West Monroe; contract for castings let to Shreveport Foundry Co., Shreveport, La.; R. S. Reynolds, Engr.

Miss., Hollandale—City, C. Hollingsworth, Mayor, receives bids until Aug. 30 to construct sanitary sewer system; approximate quantities are 9500 ft. of 8-in. vitrified sewer pipe; 6100 ft. of 10-in. pipe; 47 manholes; 3 flush tanks; reinforced concrete pump house with centrifugal pump and electric motor; Bobo & Collier, Engrs., Clarksdale, Miss. (Lately noted.)

Mo., Breckenridge—Details under Water Works.

Mo., Mexico—City will construct sewer on North Washington and Orange Sts., and South St. and S. Union Sts.; R. S. McKinney, City Engr.

Mo., St. James — Details under Water Works.

N. C., Raleigh—Details under Road and Street Construction.

N. C., Sylva—Details under Land Developments.

Okla., Tulsa—City will build North End sewer and improve South End sewer. Address The Mayor.

Tenn., Greenfield—City contemplates installing sewer system and building streets, will probably vote on bonds. Address The Mayor.

Tenn., Huntington—City considering installation of sewer system; cost estimated at \$85,000. Address The Mayor.

Tenn., Ripley—City let contract at \$75,000 to Sullivan, Long & Haggerty, Bessemer, Ala. to sewer system and settling tanks. (Lately noted.)

Tex., Clarksville—City, Prentice Wilson, Mayor, will probably open bids Sept. 15 for construction of sewer plant for 10,000 population; cost of plant \$25,000, cost of pipe line \$15,000; P. Y. Creager, Engr. in charge, Clarksville. (Lately noted to vote August 27 on bonds.)

Tex., Fort Worth—City let contract to Worthington Pump and Machinery Co., 115 Broadway, New York, for installation of pump at septic tank.

Tex., Grandview—City, G. H. Turner, Mayor, opens bids Aug. 30 to furnish all materials, equipment and labor and construct sewer system and sewage treatment plant; plans, etc., with Koch & Fowler, Consult. Engrs., 606 Central Bank Bldg., Dallas, Texas. (Lately noted.)

Tex., Houston—City opened bids for construction of storm sewer on Stanford St.; F. C. Yoeman was lowest bidder at \$20,687.

Tex., Laredo—City, L. Villegas, Mayor, will receive bids until Sept. 11 to furnish material and construct storm sewers and appurtenances, approximate quantities are: 30,708 cu. yds. earth excavation; 28,316 ft. of 12 to 24-in. vitrified pipe; 5525 ft. of 30, 33 and 26-in. segment block sewer; 60 manholes; S. F. Creclius, Civil Engr., 211 Alexander Bldg., Laredo.

Tex., Waco—City contemplates installing sanitary sewer system; address Mayor Richards.

Va., Norfolk—City, Walter H. Taylor, 3rd. Acting City Manager, receives bids until Sept. 15 to lay sewers and build manholes in sections A, B and C, Ocean View district; approximate quantities are: 600 lin. ft. of 20-in. cast iron pipe; 52,200 lin. ft. of 4 to 24-in. terra cotta pipe; 140 manholes; 42 inspection boxes; Col. W. B. Causey, City Mgr.

Telephone Systems

Ark., Little Rock—Southwestern Bell Telephone Co., main office St. Louis, Mo., will issue \$50,000,000 bonds.

Fla., Tampa—Peninsular Telephone Co., W. G. Brorain, Pres., has acquired exchange and system of the St. Petersburg Telephone Co., will probably install additional equipment; acquisition of the telephone company will add about 400 phones to the Peninsular system; holding of the local company now include all exchanges and systems in Polk, Pinellas, Hillsborough and Manatee Counties.

Md., Baltimore—Chesapeake & Potomac Telephone Co., G. H. Warren, Div. Mgr., 5 Light St. are expending \$15,000 on placing 1½ mi. additional cable in area embracing Guilford Ave. and 29th St.

N. C., Pilot Mountain—Horton Telephone Co., O. A. Davis, has acquired the Pilot System; will make improvements, etc.

Okla., Tulsa—Southwestern Bell Telephone Co., main office St. Louis, Mo., let contract to Shallenberger Construction Co., of Tulsa, at \$175,000 to erect 2-story and basement building; company will install automatic equipment. (Lately noted.)

Textile Mills

Ala., Geneva—Geneva Cotton Mills let contract at \$60,000 to D. H. Morris, of Geneva, to erect cotton mill; brick; hardwood floors; composition roof. (Lately noted.)

Ark., Pine Bluff—Jefferson Cotton Mills Co., lately noted incorporated with D. B. Minen, Pres.; Adam J. Robinson, Sec.; has plant for manufacture of sheeting and will expend about \$25,000 in repairs; will install 25,000 spindles; 340 looms; electric power plant.

Ga., Cedartown—United States Finishing Co., Henry B. Thompson, Pres., 320 Broadway, New York, let contract to Griffin-Hodges Co., Atlanta, Ga., to erect bleaching and dyeing plant at Blue Springs; company has also acquired rights and building of Blue Springs Co. and will completely remodel and utilize new plant; water supply will be furnished by Blue Springs; cost about \$1,000,000; Robert & Co., Inc., Const. Engrs., Atlanta; plant will be in charge of Paul A. Merriam, Providence, R. I.

Robert & Co., Inc., wires the Manufacturers Record as follows: "United States Finishing Co. will immediately rebuild existing buildings, 300x60 ft.; will erect new building 150x50 ft.; and rebuild 25 houses; approximate cost \$40,000; Griffin Hodges Co., Contr., Atlanta; will also build pumping plant and earthen dam; contract not let; later will considerably expand plant; Paul A. Merriam, Mgr." (Lately noted.)

Ga., Monroe—Walton Cotton Mills Co. is building additions to plant; increasing present floor space from 52,200 sq. ft. to 116,300 sq. ft.; brick walls; on 3 sides of main mill extension are up to first floor level; piers for basement columns are in place and other construction in progress; Lockwood Greene & Co., Engrs., Atlanta, Ga. and Boston, Mass.; Arthur K. Adams & Co., Contrs. (Previously noted.)

Mo., Kansas City—Goodenow Textiles Co., capital \$50,000, incorporated by F. I. Goodenow, Leo Fleming and others.

N. C., Henderson—Harriet Cotton Mills, let contract to Fisk-Carter Construction Co., Greenville, S. C., for extension to No. 3 mill; 100x104 ft.; will install approximately 4000 twister spindles, spoolers, winders and ball warpers; increase capacity 50%; J. E. Surine & Co., Engrs., Greenville, S. C. (Lately noted.)

Okla., Tulsa—Tulsa Cotton Mill Co., lately noted incorporated with \$1,000,000 capital, organized with Dan Hunt, Pres.; H. E. Pollock, Sec.; will erect yarn plant.

S. C., Easley—Alice Manufacturing Co., capital \$1,000,000, incorporated with Ellison S. McKissick, Pres.-Treas.; D. S. Burnside, Sec., both Greenville, S. C.; will manufacture silk and cotton materials.

S. C., Jonesville—Wallace Cotton Mills, J. Ridley Watts, 44 Leonard St., New York and others will hold meeting at office of Haynesworth & Haynesworth, Attys., Greenville, S. C., on August 31 to complete organization of company; will operate mill lately acquired from Victor-Monaghan Co.

S. C., Landrum—Appalachian Hosiery Mills, lately noted incorporated by Joe Lee and others, has site of 15 acres and will establish hosiery mill.

S. C., Seneca—Seneca Co., capital \$1,000,000, organized by R. H. I. Goddard, J. O. Ames, W. Gammell all of Providence, R. I.; will operate lately acquired Victor-Monaghan Mill.

Tenn., Lebanon—Lebanon Woolen Mills, Inc., J. E. Edgerton, Pres. let contract to Tennessee Mfg. Construction Co., Lebanon, to erect additions and alterations to blanket manufacturing plant; 50x65 ft. 3 stories; 63x74 ft., 2 stories; mill type construction; 20 looms; cost \$50,000; will install electric power plant; let contract for heating to Mongold & Hempel, Nashville, Tenn.; electric lighting to Fulcher Bros., Nashville. (Lately noted.)

W. Va., Martinsburg—Interwoven Knitting Mills will erect 100 ft. addition to mill. (Lately noted.)

Water Works

Ala., Hartselle—Union Water Co., (subsidiary to Alabama Water Co., Birmingham, Ala.) granted permission by Public Service Comm. to construct and operate water plant in Hartselle and Leeds; also granted permission to issue and sell \$48,000 capital stock par value \$100 per share and to issue \$500,000 6%, 25 yr. first mortgage bonds. (Lately noted.)

Fla., Miami—Details under Land Developments.

Ga., Savannah—City Water Dept., John G. Valentino, Supt., contemplates improvements to Gwinnett St. plant.

Md., Baltimore—Board of Estimates authorized right of way for construction of 30-in. water main in new water front street extending from Russell and Bush Sts. through Brooklyn to Curtis Bay; Walter A. Megraw, Water Engr.

Mo., Ava—City is having plans prepared by Elston, Axon & Russell, Engr., Springfield, Mo., for water works system; will probably vote on bonds.

Mo., Breckenridge—City has authorized E. T. Archer & Co., Kansas City, Mo., to prepare plans and estimate of installation of water and sewer system.

Mo., Cameron—City is having preliminary plans prepared for waterworks and electric light improvements; Burns & McDonnell, Engrs., 401 Interstate Bldg., Kansas City, Mo.

Mo., Kansas City—Fire and Water Board accepted supplementary report of Fuller &

Maitland, Constr. Engrs., calling for expenditure of \$11,000,000; tentative budget is as follows: main pressure tunnel, \$1,527,000; East Bottoms branch tunnel, \$916,000; Turkey Creek tunnel, \$990,000; pressure tunnel draining and control arrangements \$253,000; East Bottoms pumping station and equalizing reservoir, \$1,271,000; East Bottoms Station equipment, \$700,000; discharge mains, \$918,000; purification works, \$2,521,000; river protection works, \$345,000; intake and low lift pumping station and secondary pumping station, \$819,000; low lift and secondary pumping equipment, \$340,000; improvements of Turkey Creek station, \$400,000; will probably let contract for portion of work in October. (Lately noted.)

Mo., Norborne—City is having preliminary plans made for pumping plant, reservoir, tower, etc. Address The Mayor.

Mo., Odessa—City will extend water works system; will vote Sept. 11 on \$15,000 bonds. Address The Mayor.

Mo., St. James—City voted \$33,000 bonds for waterworks, pumping plant and distribution system, also \$12,000 bonds for sewers; Address The Mayor. (Lately noted.)

N. C., Raleigh—Details under Road and Street Construction.

N. C., Sylva—Details under Land Developments.

Okla., McAlester—City—W. E. Beatty, Mayor, will receive bids until Sept. 18 to furnish material and construct water works improvements; approximate quantities are: Section 1, 12,900 ft. of 24-in. flow line. Section 2, three 1,000,000 gal. filters. Section 3, filter and pump building. Section 4, two 14,000 g.p.m. duplex power pump, two 14,000 g.p.m. centrifugal pumps. Section 5, 2,000,000 gal. concrete reservoir. Section 6, 13,980 ft. of 14-in. and 26,360 ft. of 12-in. cast iron pipe; E. T. Archer & Co., Engrs., New England Bldg., Kansas City, Mo.

Okla., Slick—City will improve water works; Gantt-Baker Co., Engr., First National Bank Bldg., Oklahoma City, Okla. (Lately noted voting \$89,000 bonds.)

Tex., Mart—City is considering improvements to water supply; may vote on \$200,000 bonds. Address The Mayor.

Tex., Marlin—City, W. T. Goode, Mayor, let contract to Fairbanks-Morse Co., 900 S. Wabash Ave., Chicago, Ill., at approximately \$13,000 for 2 oil engine pumping units to be installed at new city lake; Levi Goodrich, City Engr. (Lately noted.)

Tex., Oak Cliff, Sta., Dallas—City, Louis Blaylock, Mayor, will drill several wells for artesian water supply.

Tex., Sweetwater—Sweetwater Suburban Water Co., capital \$17,735, incorporated by R. A. Carter, J. M. Newman and others.

Va., Richmond—City let contract to Claiborne & Taylor, Richmond, for pumping station in Byrd Park; concrete foundation; slag roof; steam heat; approximate cost \$99,130; Carneal & Johnson, Archts., Chamber of Commerce. (Lately noted.)

Va., Roanoke—Details under Land Developments.

Woodworking Plants

Ala., Luverne—L. French Stave Co., Inc., chartered by L. French, Geo. Miller and J. W. Askinson.

Ky., Corbin—E. R. Jones Furniture Co., capital \$12,000, incorporated by E. R. Jones, R. S. Smith and others.

Md., Baltimore—Leonhardt Wagon Manufacturing Co. purchased site at 8th and Ostend Sts.; will erect \$100,000 building, steel construction, built up roof, containing

40,000 sq. ft. floor space; will manufacture commercial bodies, wagons, trucks, etc.; J. Lester Barr, Engr., 202 N. Calvert St.

Mo., Louisiana—O. H. Hyde, L. R. Gifford and others of St. Louis, Mo., reported to be interested in the purchase of the Buffum Tool Co. and the Louisiana Sash & Door Factory, increasing capacity of plants, etc.

N. C., Winston-Salem—B. F. Huntley Furniture Co., Patterson and 1th St., has under construction 4-story addition, containing approximately 30,000 sq. ft. floor space; estimated cost \$15,000 to \$20,000; also installing power plant, increasing capacity; W. C. Bryant, Contr.

Va., Buchanan—Buchanan Locust Pin Co., capital \$15,000, incorporated with L. B. Vaughan, Pres.; Buchanan; C. C. Crouch, Sec., Roanoke, Va.; manufacture wooden products.

Va., Graham—Bluestone Furniture Manufacturing Corp., capital \$200,000, chartered with S. N. Hufford, Pres.; R. Y. Batkley, Sec.-Treas.; has acquired 20 acres land, will erect plant, main building to be 2-story, 270x70 ft., providing floor space of 36,000 ft.; specialize in the manufacture of dining and bedroom suites; local contractors.

FIRE DAMAGE

Ala., Five Points—Ernest Gregg's residence; loss \$20,000.

Ala., Fort Deposit—Dormitory of the Alabama Christian Institute for negroes.

Ala., Georgiana—L. C. Johnson's residence on Miranda St.; loss \$15,000.

Ala., Tuscaloosa—Central College leased by Baptist Church from University of Alabama; loss \$500,000.

Ark., Hot Springs—Campbell house, 38 room hotel on Pleasant St. Address Richard Sheldrich.

D. C., Washington—Tremont Hotel. Address The Proprietor.

Md., Baltimore—Paper Products Co.'s plant at Wheeler and Franklin Sts.; estimated loss \$350,000; Joseph M. Smith, Mgr. of plant, 127 N. Lakewood Ave.

Md., Bozman—Hotel conducted by Stella Bridges, at Breezy Point, Broad Creek, near Bozman; loss \$35,000.

Mo., Carterville—Mr. W. A. Dumbauld's building on Main street.

Mo., Carthage—Dan Quintard's farms on Oak Street road.

S. C., Florence—Mike Shie's warehouse.

S. C., Iva—Warehouse of J. F. Stokes.

Tex., Columbus—J. J. Mansfield's residence; loss \$15,000.

Tex., Corsicana—Lone Star Milling Co.'s plant; loss \$20,000.

Tex., Gainesville—Elevator of the Alliance Milling Co., 2 warehouses, Santa Fe Passenger Depot; loss \$25,000.

Tex., Jacksonville—W. A. Newton's building; loss \$10,000.

Tex., Sherman—Cotton gin owned by S. Z. Ricketts and others; loss \$20,000.

Tex., Sweetwater—Tidewell Campbell's department store.

Tex., Terrell—D. T. Weddington's residence; loss \$15,000.

Tex., Valley View—Gulf, Colorado & Santa Fe R. R.'s station; F. Merrit, Ch. Engr., Galveston; Keel & Sons' grain elevators.

Tex., Valley View—Alliance Milling Co.'s grain elevator and two warehouses; loss not estimated.

Tex., Webster—Three tanks of the Humble Oil and Refining Co.; loss \$200,000.

Tex., Windom—Church of Christ. Address The Rector.

Va., Dillwyn—Hardiman Hotel; Conner & Spencer's department store.

Va., Painter—Painter Canning Co.'s plant; loss \$20,000.

W. Va., Dana—James Morris & Co.'s store and houses; loss \$75,000.

Churches

Ala., Birmingham—Woodlawn Methodist Church, Rev. Robt. Echols, Pastor, 5337 Third Ave., N., plans to erect \$100,000 building; 3 stories; brick. (Previously noted.)

Ala., Rockford—Baptist Church, Rev. A. E. Page, Pastor, will erect building.

Ark., Osceola—First M. E. Church, South. J. M. Rhodes, Jr., Chmn., Bldg. Committee, will erect \$70,000 building; Ionic type; 60 x140 ft.; 3 stories; tile and composition roof; wood floors; stone to sill line; matt face brick above; stone columns and trim; steel trusses to support balcony in auditorium; basement and rear section for Sunday school; Aslop & Callanan, Archts., Memphis, Tenn.; day labor under supervision of Capt. Wiseman, Osceola. (Lately noted.)

Fla., Fort Pierce—First Baptist Church, A. O. Frink, Chmn. Bldg. Comm., has had plans revised and will let contract Sept. 1 to erect \$25,000 building; stucco and tile; mission roof tile; seat 300; 6 Sunday school rooms in basement; Jno. N. Sherwood, Archt., 316 Townley Bldg., Miami, and Theater Bldg., Fort Pierce. (Previously noted.)

Fla., Fort Pierce—St. Anastas's Roman Catholic Church will alter building; cost \$10,000; frame; galvanized shingle roof; Jno. N. Sherwood, Archt., 316 Townley Bldg., Miami, and Theater Bldg., Fort Pierce.

Fla., Miami—Calvary Baptist Church, Rev. A. E. Gammage, Pastor, will erect \$40,000 building at S. W. 17th Ave. and 3rd St.; seating capacity 1200; 80-ft. dome.

Ga., Statesboro—Methodist Church will erect \$10,000 to \$15,000 Sunday school building; 2 stories; fireproof; brick; steam heat. Address The Pastor.

Ky., Catlettsburg—First Baptist Church will erect Sunday school; cost \$11,000 to \$13,000; 37x65 ft.; 2 stories; brick and hollow fireproof tile; hardwood and concrete floors; interior tile; ventilators; gas heat; Tyson & Foster, Ashland, Probable Archts.; Carl Moore, Catlettsburg, Probable Contr. Address W. C. Pierce, Catlettsburg. (Lately noted.)

La., Baton Rouge—First Presbyterian Church will erect \$35,000 building at N. Boulevard and St. Napoleon St. Address The Pastor.

La., Thibodeaux—Josephite Fathers, Bertrandville, will erect \$10,000 church and school; 60x100 ft.; frame; composition shingle roof; wood floors; Wm. R. Burk, Archt., 618 Commercial Place, New Orleans; work by sub contract. (Lately noted.)

Md., Baltimore—St. Paul's Evangelical Lutheran Church will erect building, Pratt and Clinton Sts.; cost \$45,000; 45x70 ft.; auditorium to seat 400; stone; slate roof; heating, lighting and plumbing reserved; Jno. Freund, Archt., 1307 St. Paul St.; bids opened Aug. 31; following contractors estimating: E. G. Turner, 2133 Maryland Ave.; G. Walter Tovell, Eutaw and McCulloh Sts.; Adam Kratz, 118 S. Carrollton Ave.; Jno. Hiltz & Sons, 343 St. Paul St.; C. W. Littleton & Son, 4314 Liberty Heights Ave.; Hughes Engineering & Construction Corp., 2 W. 22nd St.; Thos. Hicks & Son, 106 W. Madison St.; all Baltimore.

Mo., Springfield—Campbell Street Methodist Episcopal Church, South, Rev. C. E. Ruyle, Pastor, will erect \$75,000 auditorium adjoining present Sunday school building; brick, stone, concrete and stucco; seat 800

BUILDING NEWS

BUILDINGS PROPOSED

Association and Fraternal

N. C., Charlotte—Shriners, W. F. Randolph, Chmn., Bldg. Comm., plan to erect \$400,000 Shrine Mosque on Morehead St. at Dilworth Road.

Tex., San Antonio—Ancient Free and Accepted Masons will erect \$60,000 temple at Camden and Richmond Sts.; L. Harrington & Co., Archts., San Antonio. (Lately noted.)

Tex., Sherman—Knights of Pythias will erect building to replace structure recently burned.

Va., Norfolk—Ancient Free and Accepted Masons, 301-07 E. Freemason St., plan to erect building at Colonial and Spottswood Aves.

Bank and Office

Fla., Miami—Mrs. Arlena B. Hahn, 22 N. E. Fifth St., will erect \$90,000 office and store building at N. E. First Ave. and Second St.; 2 stories; 100x95 ft.; fireproof; reinforced concrete frame; tile curtain walls; 32 offices and 8 store rooms; ultimate plans call for 8-story structure; Geo. L. Pfeiffer and Jos. O'Reilly, Asso. Archts., Miami.

La., New Orleans—Eaton McDiarmid, 317 N. Rampart St., will erect \$26,750 office building.

La., Winnebore—Franklin State Bank & Trust Co. will erect \$32,750 building; 35x74 ft.; brick, terra cotta and concrete; concrete slab and Barrett roof; cement and tile floors; metal doors; ornamental terra cotta; wire glass; vaults; heaters; city lighting; Jno. W. Baker, Archt., Crowville; N. M. Mer'wether, Winnsboro, lowest bidder. (Lately noted.)

Tenn., Nashville—Southern Baptist Convention will remodel building at 161 Elghth Ave., N.; cost \$30,000; brick.

Tex., San Antonio—San Antonio National Bank and San Antonio Loan & Trust Co. plan to erect building. Address Wm. Elffer, Chmn. Bldg. Comm.

W. Va., Wellsburg—Wellsburg National Bank, H. M. Rodgers, Cash., will erect \$100,000 building; 40x90 ft.; Indiana limestone; tile roof; marble, hardwood and concrete floors; metal doors; steel sash and trim; wire glass; plaster board; vaults; ventilators; mail chutes; vault lights; hot water heat; bids about Nov. 1.

and contain 17 classrooms; also erect \$7500 parsonage; Geo. F. Reed, Archt., Springfield.

N. C., Asheville—Haywood and Chestnut Street Methodist Churches plan to merge and erect building on Montford Ave.; cost \$125,000. Address The Pastors.

N. C., Durham—East Durham Baptist Church will erect \$50,000 building. Address The Pastor.

N. C., Spencer—Baptist Church at Trading Ford, Rev. A. N. Huneycutt, Pastor, will erect building; 2 stories; 44x70 ft.; auditorium to seat 1000 and 11 Sunday school rooms.

Tenn., South Pittsburg—First Baptist Church, Rev. Paul R. Hodge, Pastor, will erect \$10,000 addition; 10 classrooms and assembly hall; concrete brick; steam heat; R. H. Hunt, Archt., Chattanooga. (Previously noted.)

Tex., Beaumont—Phillips Chapel, M. E. Church, 1372 Ewing St., will erect \$12,000 building; brick.

Tex., Houston—Church of the Blessed Sacrament will erect \$70,000 building on Harrisburg Blvd.; F. B. Gaenslen, Archt., 301 Larendon Bldg., Houston.

Tex., Houston—Church of the Holy Name will erect \$30,000 building on North Side; F. B. Gaenslen, Archt., 301 Larendon Bldg., Houston.

Tex., Marshall—St. Joseph's Catholic Church, Rev. J. A. Schauf, Pastor, will erect \$50,000 building; Gothic type; 50x110 ft.; brick; stone trim; seat 408; J. Ed. Overbeck, Archt., Dallas. (Lately noted.)

Tex., Mexia—St. Mary's Catholic Church, Rev. Jos. H. Kelly, Pastor, is receiving bids for erection of \$12,000 building; 37.6x72 ft.; seat 200; J. Ed. Overbeck, Archt., Dallas. (Lately noted.)

Tex., Temple—Seventh Street Methodist Church will erect \$25,000 building; brick. Address The Pastor.

W. Va., Charleston—Church of Latter Day Saints will erect \$23,000 building on Pennsylvania Ave. between Birch and Green Sts.; 1 story and basement; 41x62 ft.

City and County

Ala., Anniston—Courthouse—Calhoun County Commrs., Wood Hanna, Pres., will erect \$40,000 addition to courthouse; 1 story; fireproof; Lockwood, Poundstone & Billie, Archts., Montgomery.

Ala., Center—Jail—Cherokee County Commrs. will erect building; Frederick Ausfeld, Archt., Montgomery; bids about Oct. 1.

Ala., Montgomery—Courthouse—Montgomery County Commrs. plan to erect annex to courthouse; 1 story; brick or stucco; Frederick Ausfeld, Archt., Montgomery.

Fla., Bartow—Auditorium—City, W. H. Bradley, Clk., will erect \$50,000 building; 100x100 ft.; steel frame and trusses; W. B. Talley, Archt., Lakeland. (Lately noted.)

Fla., Delray—Municipal Building—City will erect building to accommodate city for fire engine and engineer; \$12,000 bonds officials, provide guard house and quarters voted.

Fla., Sebring—Jail—Highlands County Commrs. will receive bids until Sept. 3 to erect jail; cost \$10,000; 33x50 ft.; brick, stucco and reinforced concrete; built up roof; concrete and wood floors; hot water heat; electric lights; F. H. Trimble, Archt., Orlando. (Lately noted.)

Fla., Tampa—Courthouse—Hillsborough County Commrs. will erect building.

Fla., Vero—City Hall, Fire Station and Jail—City will erect \$20,000 building for city hall, fire station and jail; hollow tile and stucco; Jno. N. Sherwood, Archt., 316 Townley Bldg., Miami, and Theater Bldg., Fort Pierce.

La., New Orleans—Market—City plans to erect market at Elysian Fields and Claiborne Aves. Address The Mayor.

Md., Riverdale—Fire Station—City will erect building at Madison and Arthur Aves.; 25x44 ft.; receiving bids. Address The Mayor.

Miss., Corinth—Home—Alcorn County Supervisors will erect Home for Poor.

Mo., Springfield—Police Station—City, W. L. McCurdy, Commr., is receiving bids to erect building for police headquarters on Market St.; cost \$17,000; fireproof; 2 stories; 36x60 ft.; brick or reinforced concrete; W. G. Mackey, Bldg. Inspector. (Lately noted.)

N. C., Durham—Home—Durham County Commrs. will erect home; Murray Nelson, County Engr.-Archt., Durham.

N. C., Leaksville—City Hall—City will erect \$50,000 building; 50x100 ft.; brick, terra cotta, wood and steel; Barrett specification roof; hollow fireproof tile; hardwood and concrete floors; ornamental terra cotta; ventilators; vaults; steam heat; Jas. W. Hopper, Archt., Leaksville; bids opened Oct. 8.

Okla., Muskogee—Muskogee County Commissioners, W. H. Harrower, Chmn., will receive bids until Sept. 4 to erect one-story brick building; separate bids for heating and plumbing; plans and specifications at office M. T. Harding, Archt., Equity Bldg., and office Lewis F. Kipp, Clk. (Heating; Plumbing).

Tex., Childress—Jail—Childress County, J. H. Callaway, Judge, will receive bids until Sept. 10, to erect jail; cost \$40,000; Southern Steel Co., Archt., San Antonio.

Tex., Huntsville—Courthouse—Walker County, A. T. McKinney, Jr., Judge, receives bids Aug. 29 for remodeling courthouse; Jno. McClelland, Archt., 300 Woolworth Bldg., Houston.

Tex., Orange—Jail—Orange County Commrs. will receive bids until Sept. 15 to erect \$40,000 to \$50,000 building; 44x46 ft.; 3 stories; brick and concrete; accommodate 88 prisoners; plans by Southern Steel Co., San Antonio.

Tex., Texarkana—Municipal Building—City will erect municipal building; \$200,000 bonds voted. Address The Mayor. (Lately noted.)

Tex., Uvalde—Fire Station—City will erect Fire Station at Getty and Garden Sts.; 2 stories; fireproof.

Va., Prince George—Courthouse—Jail—Prince County Board of Supervisors, W. D. Temple, Clk., will receive bids until Sept. 24 to erect jail; cost \$10,000; plans and specifications at office Fred A. Bishop, Archt., Petersburg, and Mr. Temple, Prince George. (Lately noted.)

W. Va., Bluefield—Municipal Building—City, Clarence E. Ridley, Mgr., will receive bids until Oct. 9 for furnishing plans and supervising the construction of municipal building; cost about \$100,000. (Previously noted.)

Dwellings

Fla., Bagdad—Bagdad Lumber Co. will erect 5 or 6 bungalows.

Fla., Miami Beach—Dittman Engineering & Construction Co. has permit to erect \$17,500 residence and garage at 1700 Lennox Ave.

Fla., Miami Beach—Watson Corporation will erect residence at Sheridan Ave. and 34th St.; Spanish-Moorish architecture; 38x45 ft.; 2-story garage and apartment in connection; concrete and tile.

Fla., Orlando—Leonard Gentile will erect residence on Lake Adair; Italian villa type.

Fla., Sewall's Point (P. O. Stuart)—W. C. Carnegie, Rector, Pa., will erect \$25,000 dwelling; hollow tile and stucco mission tile; oak and tile floors; Jno. N. Sherwood, Theater Bldg., Fort Pierce; contract let Sept. 1.

Fla., Watasso—A. E. Michaels will erect \$15,000 residence; tile; mission roof tile; Jno. N. Sherwood, Archt., 316 Townley Bldg., Miami, and Theater Bldg., Fort Pierce; bids opened Sept. 1.

Ga., Macon—Bass Hamlin Co. is erecting 9 dwellings; cost \$80,000; two, hollow tile stucco, two frame and five brick veneer; Genesco composition roof; hard and pine floors; 5 Arcola heating plants (American Heating & Plumbing Co.); electric lights; plans and construction by owner.

Ky., Bulan—Ajax Coal Co. does not contemplate erection of dwellings as lately reported.

Ky., Louisville—Gordon Miller, 7 Castlewood St.; will erect dwelling on Eastleigh St.; cost \$11,000.

Ky., Louisville—Mrs. Theo. Klarer, 3830 Market St., will erect residence; cost \$12,000.

Ky., Whitesburg—C. H. Back will erect \$10,000 dwelling; 32x44 ft.; brick; composition roof; hardwood and pine floors; plaster board; bids opened Aug. 25; W. D. Harris, Archt., Whitesburg. Address owner. (Lately noted.)

La., New Orleans—E. Howard McCaleb will erect \$15,000 residence; frame and brick; tile roof; wood floors; hot water heat; Wm. R. Burk, Archt., 678 Commercial Place, New Orleans; work by sub contract. (Lately noted.)

La., New Orleans—L. Aronson, will erect residence, Octavia St.; cost \$12,000.

La., Shreveport—Walter Marburg will erect \$10,000 dwelling and garage at 1727 Elizabeth St.; 1 story; brick.

Md., Baltimore—Nathan Wanderstock, 4503 Maine Ave., will erect dwelling and garage at Montebello Lake Drive and Glenwood Ave.; cost \$15,000; Stanislaus Russel, Archt., 11 E. Lexington St.; Charles E. Ehman & Sons, Contrs., 703 Woodbourne Ave.; both Baltimore.

Md., Baltimore—M. W. Whitely & Co., Inc., 2333 E. Monument St. will erect 3 bungalows on north side of Ashbury Ave. near Furley Ave.; cost \$12,000; 20x26 ft.; frame; J. Strickroth, Archt., 100 N. Milton Ave., Baltimore; owner builds. (Lately noted.)

Md., Baltimore—Columbia Building Co., Frank Novak, Pres., 3311 McElderry St., will erect about 75 dwellings on west side of Highland Ave., between Philadelphia Ave. and Monument St.; site 900x100 ft.; 2 stories; brick; 6 rooms and bath; cost \$350,000.

Md., Baltimore—Rochester Home Bldg. Co., 3600 Old York Road will erect 25 two-story dwellings, 700-48 McKewin Ave.; 16x28 ft.; also erect 2 two-story dwellings at 703-55 McKewin Ave.; 14x45 ft.; brick; Carey roofs; furnace heat; total cost \$100,000; Chas. McKewin, Archt., 2418 Harford Ave., Baltimore; owner builds. (Lately noted.)

Md., Baltimore—Solomon Senker, 1649 Ruxton Ave., will erect 2-story frame cottage and garage on Homeland Ave. near Park Heights Ave.; cost \$15,000.

Md., Baltimore—Frank Novak Realty Co., Gunther Bldg., will erect 6 frame dwellings and 6 garages at 1700-12 Tivoly Ave.; cost \$40,000; also erect 26 two-story brick dwellings at 500-14 and 501-25 Mount Holly St.; cost \$48,000.

Md., Baltimore—James Keelty, 3600 Edmondson Ave., will erect 32 two-story brick dwellings, 300 and 400 blocks of Mount Holly St.; cost \$85,000.

Md., Baltimore—Phillip S. Morgan, 12 E. Lexington St., will erect three 2½-story residences on west side of Allendale Rd., near Windsor Mill Rd.; cost \$15,000; frame; slate roofs; hardwood floors; steam heat; electric lights; Geo. Wessel, Archt., 3001 Lyttleton Rd. (Lately noted.)

Md., Baltimore—Progressive Building Assn., 874 Linden Ave., will erect 15 two-story brick dwellings, 2301-29 Lauretta Ave.; cost \$30,000; 13.16x42 ft.; furnace heat; L. A. Schoenlein, Jr., Archt., 3535 Liberty Heights Ave., Baltimore; owner builds.

Md., Baltimore—Isaac N. Cooper, 912 University Parkway, will erect 2½-story brick cottage on Charles St. Ave., north of Warrenton Road.

Md., Baltimore—Stephen P. Harwood, 10 E. Fayette St., will erect 10 brick dwellings at Baker and Longwood Sts.; cost \$30,000; 2 stories.

Miss., Hattiesburg—R. D. Moore will erect dwelling at 4th Ave. and Mamie St.; English type; 2 stories; stucco and hollow tile; tile roof.

Mo., Edina—Wilbur T. Sharp will erect 7-room bungalow with garage in basement.

Mo., Independence—Byron Stewart will erect 2-story frame residence at Delaware and College Sts.

Mo., Independence—Mrs. Maggie Harris will erect residence.

Mo., Independence—Geo. Pennell will erect dwelling.

Mo., St. Joseph—S. A. Moore, Mgr. St. Joseph Automobile Club, will erect home at Noyes Blvd. and Clay St.

N. C., Charlotte—H. C. Sherrill Co. will erect 5 six-room dwellings on Harding Place as follows: Two, brick veneer, two, frame and one stucco on metal lath; cost \$28,000; also erect 5 six-room dwellings on E. 8th St.; two, brick veneer, and three, frame; cost \$27,000.

N. C., King—T. C. McGee will erect dwelling.

N. C., King—W. W. Southern, Meadows, will erect residence.

N. C., Winston-Salem—George Crotts, Southside, will erect dwelling on Crafton Heights.

N. C., Winston-Salem—W. B. Carlton will erect \$12,000 residence on Sunset Drive; 8 rooms.

Tenn., Memphis—M. Blockman will erect \$10,000 dwelling; brick veneer; asphalt shingle roof; oak and pine floors; interior tile; hot water heat; bids opened about Sept. 1; Jas. L. Gatling, Archt., Memphis. (Lately noted.)

Tex., Austin—Ed. Rhodes Wroe will erect residence; cost \$10,000; 1½ stories; 34x40 ft.; brick over interlocking tile; asbestos shingle roof; wood floors; bids opened about Sept. 10. Address Giesecke & Harris, Archts., 520-21 Littlefield Bldg., Austin.

Tex., Dallas—Dr. R. W. Barnes will erect \$30,000 dwelling at 10th and Tyler Sts.; colonial type; 2 stories; 16 rooms and 2 baths; brick veneer; Jno. W. Westbrook, Archt., Dallas.

Tex., Dallas—Gardner Lipscomb will erect \$16,000 dwelling on Mockingbird Lane, Highland Park; 2 stories; 9 rooms; brick veneer; Flint & Broad, Archts., Dallas.

Tex., Gordon—J. W. Conway will erect dwelling; brick; A. B. Withers, Archt., Mineral Wells.

Tex., Houston—Mrs. Lena Brown will erect 12-room brick veneer residence at Milam and Rosedale Sts.; cost \$15,000; day labor; J. M. Glover, Archt., Houston.

Tex., San Antonio—Milton Michael will erect dwelling on Elizabeth Road, Terrell Hills; cost \$10,000; Harvey P. Smith, Archt., San Antonio; all work by sub contract.

W. Va., Beech Bottom—A. S. Burger and associates will erect about 40 miners' houses in connection with development of 150-acres of coal land.

W. Va., Wheeling—J. R. Anderson, Belaire, Ohio, is preparing plans for dwelling on cliff above national road known as McCulloch's Leap; English castle type; 2 stories; 2 towers.

W. Va., Wheeling—W. E. Stone will erect \$10,000 frame dwelling at Leatherwood; also erect \$18,000 frame and stone addition to dwelling at Leatherwood.

Government and State

N. C., Raleigh—Capitol—State, W. N. Everett, Sec., will repair capitol; T. C. Atwood, Engr., Raleigh, will supervise construction. (Lately noted.)

Hospitals, Sanitariums, Etc.

Ark., Hot Springs—Baptist National Hospital, Inc., Rev. Wm. Cooksey, V.-P., Gen. Mgr., 722 Garland Ave., will erect fireproof hospital; steel, concrete and pressed brick; accommodate 500; cost \$2,000,000; Hubert McGee, Archt., 632-4 Madison Ave. Bldg., Memphis, Tenn. (Lately noted.)

D. C., Washington—Department of Interior, Office of Secretary, will receive bids until Sept. 19 to erect pathological laboratory at Freedmen's Hospital; F. M. Goodwin, Asst. Sec.

Ga., Atlanta—City, W. P. Price, Purchasing Agt., will receive bids until Aug. 31 for additions and alterations at Grady Hospital consisting of Elsas Free Clinic, etc.; separate bids for heating and plumbing; plans and specifications at office Hentz, Reid & Adler, Archts., 92½ N. Forsyth St., Atlanta.

Ga., Atlanta—Dr. W. W. Blackman is Pres. of company to erect tourist and health resort, "Blackman Terrace;" cost \$225,000; fireproof; reinforced concrete or steel frame; flat roofs of promenade tile; pitched roofs, Spanish tile; gymnasium and auditorium in main building; golf and tennis courts; separate residence for Dr. Blackman; bids about Oct. 30; E. C. Wachendorf, Archt., 620 Forsyth Bldg., Atlanta. (Lately noted.)

Tenn., Oakville—Memphis and Shelby County Tuberculosis Hospital, Memphis, will erect infirmary building at Oakville Memorial Sanitarium; cost \$75,000; 2 stories; 60x110 ft.; concrete and brick; accommodate 60 patients; Jones & Furbringer, Archts., Memphis; also plans to erect children's building. (Previously noted.)

Tex., Bastrop—W. B. Ransome receives bids Aug. 30 to erect 2-story hospital; separate bids on heating, plumbing and electric wiring; plans and specifications at office J. E. Haines.

Tex., Beaumont—Weyman B. Dunlap, Jr., and Jas. E. Ray are organizing stock company to erect 4-story hospital; cost about \$300,000; concrete and steel; 20 rooms with private baths, 7 wards of 7 to 10 beds, 4 operating rooms, etc.; 2 elevators; Livesay & Wiedemann, Archts., Beaumont.

Tex., El Paso—Horman & Crimen will erect \$210,000 tubercular sanatorium; 7 stories; 140 rooms; reinforced concrete, and hollow fireproof tile; composition roof; cement floors; metal doors; ornamental terra cotta; steel sash and trim; wire glass; ventilators; Dunham steam heating plant, \$21,000; lighting, \$12,000; Otis Elevators, \$8500; Address O. H. Thorman, Archt., 639 First

National Bank Bldg., El Paso. (Lately noted.)

W. Va., Huntington—State Board of Control, Jas. S. Lakin, Pres., Charleston, will receive bids until Sept. 28 to erect dormitory at Huntington State Hospital, Dr. L. V. Guthrie, Supt.; cost \$200,000; 121.9x163.8 ft.; 3 stories with basement; fireproof; brick, tile and concrete; Bedford Indiana limestone; built up roof with tile roof in front portion; structural steel; wood doors; iron stairways; corridor floors, marbleoid over concrete; metal joist construction; fireproof floors; metal lath, gypsum and cement plaster; electric wiring, conduit system; metal toilet partitions; all interior partitions, metal stud; window frames, wood; plans and specifications at office Richard M. Bates, Jr., Archt., Huntington. (Lately noted.)

Hotels and Apartments

Fla., Frostproof—Fort Clinch Hotel, Inc., Arthur P. Cody, Pres., will erect \$150,000 hotel; 3 stories; tile; white sand limestone brick and concrete; 50 rooms; M. Leo Elliot, Archt., Tampa; C. A. Rountree, Engr., St. Petersburg. (Lately noted.)

Fla., Miami—Mrs. Sue D. Snyder, 131 N. W. 2nd St. will erect apartment house; cost \$45,000; 3 stories; 38x81 ft.; natural stone; Spanish renaissance type; 18 apartments, consisting of 2 or 3 rooms, bath, kitchenette and dining alcove.

Fla., Miami—Charles Fowler will erect apartment house at Sheridan Ave. and Twentieth St.; 50 suites; 150x125 ft.

Fla., Miami Beach—George Jahn, Contr., will erect apartment house to be known as "Palermo", on Meridian Ave. and 8th St.; cost \$72,000; 100x140 ft.; 20 apartments, consisting of living room dining room, kitchen, bath, dressing room and alcove; electric lights; electric heaters; Italian Renaissance type of architecture; H. Hastings Mundy, Archt., Miami Beach; owner builds.

Ky., Ashland—Buckingham Hotel Co., G. A. Nash, Sec., will erect hotel; cost \$1,325,000; 200x142½ ft.; 9 stories; 251 rooms; basement for refrigerating and heating plants, laundry, storage, rooms, billiard and pool rooms, public baths; 1st floor for lobby, dining room, kitchen, coffee shop, 10 stores, etc; mezzanine floor for ball and banquet room, writing rooms, men's and women's toilets and rest rooms; above floors contain sleeping rooms; J. R. Gieske, Archt., Huntington, W. Va.; Bankers Bond Company, Louisville, interested in financing. (Lately noted.)

La., New Orleans—Lake Realty Co. will erect apartment house on Charles St. and Henry Clay Ave.; 45x81 ft.; brick and concrete; 3 apartments of 10 rooms each; Moise H. Goldstein, Archt., Hibernia Bank Bldg., New Orleans, receiving bids on sub contracts.

Md., Baltimore—Julius Apartment Corporation will erect 4 story addition to Astor Apartments, 25th and St. Paul Sts.; 33 suites; cost \$150,000; J. E. Moxley, Jr., Archt., Equitable Bldg., Baltimore; bids opened Aug. 25.

N. C., Radford—George Penney will improve and enlarge Delp Hotel; H. Wharton, Archt., Radford.

N. C., Winston-Salem—D. D. Smith is promoting plans for the development of 9300 acres of land known as Hanging Rock, about 25 mi. from Winston-Salem; is building automobile road to crest of mountain, and will erect 5-story hotel; construct 200-acre lake on Indian Creek, and 18-hole golf course, with aeroplane landing; E. S. Draper, Landscape Archt., Charlotte; contemplates organizing development company within 30 days.

S. C., Union—Union Hotel Company will erect hotel on Main St.; cost \$100,000; H. Olin Jones, Archt., Greenville.

Tex., Houston—Rice Hotel, Barney Morton, Mgr., will erect cafeteria; cost \$45,000; 3 entrances.

Tex., Marshall—John Keiffer, Mgr. Hotel Marshall, plans erection of hotel; cost \$125,000; 150x85 ft.; 4 stories; brick, concrete and steel; 75 rooms; steam heat; electric lights; metal ceilings; interior tile; mail chutes; ventilators; concrete floors; steel sash and trim; wire glass; contract let about Feb. 1, 1924; C. G. Lancaster & Son, Archts., Marshall. (Lately noted.)

Va., Richmond—Max E. Ruehrmund will erect 2 apartment houses at 1709-11 Hanover Ave.; cost \$70,000; 34x76x30 ft.; 3 stories; brick; tin roof; hot water heat; wood floors; owner builds.

W. Va., Fairmont—Daymore McIntire, 829 Benoni Ave., will erect apartment house at 2nd St. and Albert court; cost \$25,000; 38x58 ft.; 3 stories; hollow tile, brick and stucco; composition and tile roof; wood floors; electric lights; A. C. Lyons, Archt., Fairmont. (Lately noted.)

W. Va., Morgantown—Morgantown Hotel Co., Frank Cox and others will erect hotel; cost \$750,000; 8 stories and basement; 50x188; brick; Sydney F. Heckert, Archt., Bessemer Bldg.; work temporarily held in abeyance. (Cole Bros. Construction Co. and Jones & Laughlin Steel Corp., Pittsburg, Pa., lately noted as contractors for excavation and structural steel fabrication respectively.)

Miscellaneous

D. C., Washington—Washington Baseball Club, Clark Griffiths, Pres., will enlarge stands at American League Park; cost \$100,000; seating capacity 35,000.

La., Monroe—Louisiana Baptist Orphanage will erect orphanage on old Kansas plantation; 5 brick cottages; accommodate 175 children; cost \$125,000.

Mo., Branson—Clubhouse—Ancient Free and Accepted Masons (Bierig Brothers of Springfield and others) plans to erect \$50,000 clubhouse at Long Beach, on Lake Taney-como.

N. C., Durham—Home—King's Daughters, Mrs. J. C. Angier and others will erect additions to Old Ladies' Home; cost \$45,000; brick veneer; slate roof; hardwood, tile floor; low pressure steam heat, Warren-Webster; Rose & Rose, Archts., Durham. (Lately noted.)

S. C., Aiken—Dairy Barn—Eleanor Sheffield Phelps will rebuild dairy barn with hay storage, lately noted burned; hollow tile, asbestos or other fireproof roof; concrete floor; probably U. S. Government plans will be used; bids until Nov. 1.

Tenn., Chattanooga—Orphanage—Blackford Street Colored Orphanage, Dr. P. A. Stephens, and others will establish orphanage.

Railway Stations, Sheds, Etc.

Ala., Birmingham—St. Louis & San Francisco R. R., F. G. Jonah, Ch. Engr., St. Louis, is reported to erect \$500,000 freight terminal and office building on First Ave.; reinforced concrete and brick.

Fla., Daytona—Florida East Coast Ry. Co., N. H. Rodenbaugh, Ch. Engr., St. Augustine, Fla., will erect station; cost \$100,000; 70x170 ft.; hollow tile stucco; Spanish Architecture; tile roof; cement tile floors; Henry McCarrell, Archt., St. Augustine; bids opened Sept. 5. Address W. G. Brown, Engr., Maintenance of Way., St. Augustine. (Lately noted.)

Tex., Lorraine—Texas & Pacific Railway, E. F. Mitchell, Ch. Engr., Dallas, will build passenger station and freight depot.

Schools

Ala., Akron—Board of Education will erect \$25,000 high school.

Ala., Albany—Albany School District will vote on \$75,000 bond issue for equipping the school and to erect additions.

Ala., Collinsville—Southern Methodist Conference will build school opposite Porterville; consist of several large buildings.

Ala., Cordova—Town voted \$30,000 bond issue to erect school. Address School Board.

Ark., Forrest City—Board of Education will erect school for negroes; to be known as Lincoln Consolidated school; cost \$20,000; 8 class rooms; auditorium; offices; 55x69 ft.; frame, brick veneer and stone, pine floors; warm air heat; Jas. L. Gatling, Archt., Memphis; bids opened Aug. 23. (Lately noted.)

Ark., Oak Grove—Oak Grove School District will erect school; 4 rooms; brick; E. P. Wolpert, Archt., Jonesboro.

D. C., Washington—District Commissioners, District building, rejected bids to erect \$130,000 school at Spring Road and Rock Creek Church Road, N. W. and will call for new bids in December or January; Albert P. Harris, Archt., District Building, Washington, D. C.

Fla., Gainesville—Board of Managers of Floried Farm Colony will erect school for epileptics and feeble minded; 1 story; brick; Greeley & Benjamin, Archts., Bisbee Bldg., Jacksonville.

Fla., Knights—Board of Public Instruction, Hillsborough County, will receive bids for school; plans and specification at office of J. E. Knight, Sec., Tampa.

Fla., Tallahassee—Tallahassee Special Tax School District will vote on \$150,000 bonds for the erection of school; Address School Trustees.

Ga., Atlanta—City Board of Education will erect first unit of senior high school for girls; cost \$350,000 without equipment; 3 stories and basement; reinforced concrete and brick; tile and tar and gravel roof; concrete and oak floors; plumbing, heating and wiring to cost about \$100,000; hollow fireproof tile; metal doors, vaults, ventilators; ornamental terra cotta; steel sash and trim; wire glass, Edwards & Sayward, Archts.; Lockwood, Greene & Co., Asso. Archts.; A. Ten Eyck Brown, Supervising Archt., all Atlanta; bids opened Sep. 7. (Lately noted.)

Ga., Chamblee—Board of Education will erect grammar school.

Ga., Cordele—Colored Methodist Church will complete building of Holsey Institute; cost \$50,000; accommodate 100; auditorium to seat 500. Address The Pastor.

Ga., Macon—Blbb County Board of Education, C. H. Bruce, Supt., will receive bids until Sept. 12 to erect high school for boys; accommodate 1500 students; main building 3 stories; 260x160 ft.; 30 classrooms; gymnasium, 112x106 ft.; shop 22x122 ft.; Curran R. Ellis, Macon, and G. Lloyd Preacher, Augusta, Asso. Archts. (Lately noted in detail.)

Ga., Midville—Midville School District voted \$50,000 bonds for school. Address Dist. School Trustees.

Ga., Scottdale—Board of Education will erect 16-room building.

Ky., Camp Taylor—Board of Education will erect \$50,000 school.

Ky., Okolona, R. Sta., Louisville—Board of Education will erect school; cost \$50,000.

La., Bastrop—Board of Education will erect school at Johnston, in Morehouse parish; cost \$17,000; contract let Aug. 29; J. W. Smith, Archt., Monroe.

La., Baton Rouge—Louisiana State University, L. R. Hames, Sec. Building Committee, will receive bids until Aug. 31 to erect stadium; separate bids for heating, lighting equipment, 2-300 horse power horizontal water tube boiler; plans and specification at office of Theo. C. Link, Archt., Capitol Building, Baton Rouge. (See Machinery Wanted—Heating; Lighting; Boiler.)

La., Destrehan—St. Charles Parish School Board, Hahnville, will erect a school; cost \$80,000; 70x123 ft.; brick; tile and compo. roof; wood floors; low pressure steam heat; Delco lighting, \$1000, William R. Burk, Archt., 411 Balter Bldg., 618 Commercial Pl., New Orleans; bids opened Sept. 4. (Lately noted.)

La., Hahnville—St. Charles Parish School Board, will erect school; \$80,000; 70x123 ft.; brick; tile and compo. roof; wood floors; low pressure steam heat; Delco lighting, \$1000, William R. Burk, Archt., 411 Balter Bldg., 618 Commercial Pl., New Orleans; bids opened Sept. 4.

La., New Orleans—Our Lady of Good Counsel, Louisiana Ave. and Camp St., will erect school; cost \$80,000; brick; 2 stories; 60x123 ft.; tile roof; wood floors; low pressure steam heat; William R. Burk, Archt., 411 Balter Bldg., 618 Commercial Pl., New Orleans; contract in about 60 days. (Lately noted.)

La., New Orleans—St. Ann's Parochial School, A. J. Gaudet, Chmn., Bldg. Comm., 1209 N. Galvez St., will complete building, lately noted; concrete steel reinforcement; sheet metal work; structural steel and iron work; electrical fixtures; plumbing, etc.; Toledan, Wogan & Bernard, Archts., Title Guarantee Bldg., New Orleans. (See Machinery Wanted—Building Material; Concrete; Steel Reinforcement; Sheet Metal Work; Masonry; Roofing; Structural Steel; Glazing; Paving; Drainage; Plumbing; Drinking Fountain; Hydrants; Blackboards; Electrical Fixtures; Heating Plant; Flooring; Millwork.)

La., New Roads—Board of Education will erect school building; cost \$85,000; brick; 2 stories; 14 rooms; tile roof; wood floors; William R. Burk, Archt., 411 Balter Bldg., 618 Commercial Pl., New Orleans; contract let in about 60 days. (Lately noted.)

La., Shreveport—City voted \$1,000,000 school bonds, including \$400,000 for new high school; \$275,000 for grade school on Travis St.; \$125,000 for completing Queensborough building; \$100,000 for furnishing schools; \$100,000 for additions, etc. (Lately noted.)

Miss., Drew—Sunflower Board of Education, Indianola, will erect \$10,000 school for negroes.

Miss., Hollandale—Washington County School Board, Greenville, Miss., will erect \$15,000 school for negroes.

Miss., Port Gibson—Board of Trustees of Port Gibson High School, will receive bids until Sept. 25 to erect negro high school; cost \$10,000.

Mo., Louisville—Board of Education will erect school for negroes on Virginia Ave.; cost \$56,000; 10 classrooms; playrooms and rest rooms; electrical clocks, fire alarms and telephones; J. Meyrick Colley, Archt., Louisville.

N. C., Durham—Durham County Board of Education plans building high school in Mangum township.

N. C., High Point—Methodist Protestant College will erect 2 dormitories; cost \$75,000; central heating plant to cost \$28,000; home for the president, \$10,000.

N. C., Warsaw—Board of School Trustees, H. L. Stevens, Chmn., will erect school at Lanefield and Bouden; cost \$35,000; 132x80 ft.; brick; metal roof; hardwood and cement floors; J. P. Lynch, Archt., Wilmington; bids opened about Sept. 5.

N. C., Wilson—Cross Roads Township voted \$75,000 additional school building bonds. Address County Board of Education, Wilson.

N. C., Winston-Salem—City, James C. Hanes, Mayor, will erect addition to South Side School; cost \$17,000; 4 rooms. (Lately noted.)

Okl., Muskogee—Oklahoma School for Blind, O. W. Stewart, Supt., will not erect addition as lately reported.

S. C., Rantowles, mail Johns Island—Board of Trustees, School Dist. No. 2, Jas. A. Postell, Chmn., will receive bids until Sept. 6, at office of Benson & Barbot, Archts., Charleston, S. C., to erect 4-room frame school; plans, etc., from architects.

Tenn., Chattanooga—School Board will improve school building on southside; 8 class rooms; cafeteria; toilet facilities; R. H. Hunt, Archt., James Bldg., Chattanooga, Tenn. (Lately noted.)

Tenn., Henderson—Board of School Trustees, J. M. Fry, Chmn. of Building Comm., will erect annex to school; lately noted; cost \$15,000; 66x56 ft.; 2 stories; brick; composition roof; pine floors; H. T. McGee, Archt., Memphis; bids rejected. (See Machinery Wanted—Fire Escape.)

Tenn., Memphis—Board of Education will enlarge Melrose School.

Tenn., Nashville—Vanderbilt University, Dr. J. H. Kirkland, Chancellor, will erect School of Medicine and Hospital; cost \$2,000,000; 3 units; main building, 458x337 ft.; 4 stories and basement; 4-story nurses' building with sleeping porch; hospital building for 163 beds and various departments; University wires Manufacturers Record: "Bids upon medical group were received from following firms—general contract: G. B. Howard & Co., Foster & Creighton, Rock City Construction Co. and Gould Contracting Co., all Nashville; L. P. Soule & Sons Co., Boston, Mass.; Hegeman Harris Co., and Geo. A. Fuller Co., both New York City. Electrical work: Herbrick & Lawrence, Nashville; Hixon Electric Co., Boston; Sanborn Electric Co., Indianapolis, Ind. Heating and ventilating works: State Heating & Ventilating Co., Memphis; Burke & Co., Boston; Wm. A. Pope, Chicago. Plumbing work: Kennedy & Co., Nashville; Wm. Hillenbrand Co., Cincinnati; Jas. A. Cotter Co., Boston. We are not ready to give out any information in regard to amount of bids; Coolidge & Shattuck, Archts., Boston." (Lately noted.)

Tenn., Tiptonville—Board of Education, A. E. Markham, Pres., will receive bids for the erection of school until Sept. 3; cost \$60,000; 10 class rooms; auditorium 50x72 ft.; manual training and domestic science department; library, etc.; Mahan & Broadwell, Archts., Memphis; plans and specifications at office of Architects. (Lately noted.)

Tex., Athens—Henderson County will vote on \$100,000 bond issue for school.

Tex., College Station—Board of Directors of Agricultural and Mechanical College of Texas, will receive bids until Sept. 5 for

construction of Administration building; cost \$100,000; E. B. LaRoche, College Station, Archt. (Lately noted.)

Tex., Desdemona—Independent School District will erect building; 1 story; 6 class rooms, book room, library, principal's office; toilet rooms; A. D. Withers, Archt., Mineral Wells. (Lately noted.)

Tex., Devine—Devine Independent School District plans school improvements.

Tex., Eagle Lake—Board of School Trustees will erect high school; cost \$105,000; 2 stories; reinforced concrete, brick and tile; concrete slab and built up roof; concrete slab, mastic, wood and tile floors; steel sash; metal trim; steam heat; floor space 1st floor, 16,920 sq. ft., 2nd, 12,900 sq. ft.; Glesecke & Harris, Archts., 520-21 Littlefield Bldg., Austin; bids opened about Sept. 3. (Lately noted to open bids about Aug. 15.)

Tex., Field Creek—Field Creek School District voted \$15,000 bonds for the erection of school. Address Dist. Trustees.

Tex., Lubbock—County Board of Education, E. R. Haynes, Supt., will erect \$10,000 brick school at New Hope.

Tex., Oak Cliff (Sta. A. Dallas)—Board of Education will erect high school, Jefferson and Boundary Sts.; \$500,000; 200x230 ft.; 3 stories; fireproof; brick; stone trim; 4 study halls to accommodate 150 pupils each; 38 class rooms, 10 special rooms, armory and and rifle range, auditorium, gymnasium, locker rooms, shower baths, library, etc.; ready for bids about October 1; DeWitt & Lemon, Archts., Dallas. (Lately noted to open bids about Aug. 15.)

Tex., Paris—Forest Chapel School District, A. K. Haynes, Pres. will receive bids for the erection of frame and brick veneer school; 60x100 ft.; cost \$10,000 to \$15,000; Curtis & Lightfoot, Archts., Paris.

Tex., Poth—Board of Education will erect \$20,000 high school; voted bonds.

Tex., Spur—School Board will erect \$40,000 building, lately noted; 12 rooms and auditorium; brick and tile; Johns-Manville roof; wood floors; steam heat; Delco lights; R. S. Glenn, Archt., Cisco; Cook Bros., Baird, Contr. at \$8750 for tile and brick. (See Machinery Wanted—Lockers; Hollow Tile.)

Va., Falls Church—School Board purchased 2½-acre site; plans erecting \$50,000 school; 10 rooms and study hall; contemplates bond issue.

Va., Rocky Mount—School Board will erect high school; cost \$40,000; 100x150 ft.; 1 story; brick, wood, steel; built-up roof; wood floors; Smithey & Tardy, Archts., Anchor Bldg., Roanoke; day labor. (Lately noted.)

W. Va., Adamston—Board of Education of Coal District will receive bids until Aug. 28 at its office, Victory High School, Adamston, to erect 1 story frame school; 3 class room with cloak rooms adjoining; plans and specification at office of Edward J. Wood & Son, Archts., Rooms 30 and 31 Loundes Bldg., Clarksburg, W. Va.

W. Va., Charleston—Kanawha County Bd. of Education will receive bids until Sept. 11 for the erection of 4 schools; 8-room building on Truslow St.; 8-room building on B gley Ave.; 5-room building at Island; 8-room building with auditorium on Swann's Hill; plans and specifications at office of Warne, Tucker & Patten, Archts., Masonic Temple, Charleston. (Lately noted.)

W. Va., Dehue—Board of Education of

Logan District will erect school; Richard M. Bates, Jr., Archt., 414-16 11th St., Huntington, W. Va.

W. Va., Wheeling—Board of Education does not contemplate erection of building at this time as lately reported.

Stores

Ala., Tuscaloosa—W. W. Fordyce will erect 10 stories and movie theater; ready for bids; brick; tar and gravel roof; plate glass; C. M. Ayres, Archt., Tuscaloosa.

Fla., Miami—A. B. Vance, will erect business building; cost \$20,000; 50x72 ft.; 8 stories; R. A. Preas, Archt., Miami.

Ky., Whitesburg—Bert Bach and others will erect business building; cost \$20,000; contract at once.

Md., Baltimore—Bernheimer-Leader Store will erect department store; cost \$1,500,000; Smith & May, Archt., Calvert Bldg., Baltimore; Taussig & Glesch, Interior Archts., Chicago; Chas. L. Reeder, Consult. Eng., 916 N. Charles St., Baltimore. (Lately noted.)

Miss., Meridan—Clarence Smylie will erect building on 23rd St.; 56x120 ft.

Mo., Greenfield—T. K. McConnell will erect cement business building.

Mo., Kansas City—W. C. Gumm will erect stores and theatre at Washington and 75th Sts.; 2 stories; S. B. Tarbet, Archt., Kansas City.

Mo., St. Louis—Cornet & Zeibig Trust will erect business building on York and Maryland Aves.; 2 stories; 100x100 ft.; 1st floor contain 6 shops; 2nd floor to contain tea room, beauty parlors and specialty shops; Venetian type; Preston J. Bradshaw, Archt., St. Louis.

Tenn., Memphis—F. J. Ozanne & Co., will erect \$48,000 store and office building for Perkins-Heard interests at Union and Third Sts.; 2 stories; brick; Jones & Furbringer, Archts., Memphis.

Tex., Dallas—George Scropoulis will erect store at Cole and Haskell Aves.; cost \$20,000.

Tex., Dallas—M. C. Matson will erect \$11,000, 1 story brick building at Haskell and Cole Aves.

Theatres

Fla., Ft. Lauderdale—M. A. Horst will erect theatre; cost \$50,000; reinforced concrete; electricity; John N. Sherwood, Archt., 316 Townley Building, Miami, Fla.

Tenn., Chattanooga—Tennessee Enterprise Co., F. H. Dowler, Jr., Mgr., plans to erect \$260,000 theater.

Tenn., Knoxville—Gay Street Leasing Co. is reported to erect theater on State St.

Warehouses

Ala., Guntersville—Gilbreath Bros. will erect warehouse; cost \$18,000; 68x120 ft.; brick walls. U. S. construction; asphalt roof; concrete floors; D. Anderson Dickey, Archt., Huntsville; construction by owners. (Lately noted.)

La., Shreveport—Jones, Roessle & Olschner, Archts., Ardis Bldg., will receive bids until Aug. 31 to erect \$150,000 store and warehouse; 2 stories, 80x294 ft.; reinforced concrete and brick.

Md., Baltimore—E. Scott Payne Company, will erect warehouse, 402-406 N. Exeter St.; cost \$50,000; 4 stories; brick.

Tenn., Knoxville—Planters' Warehouse, Inc., Jas. W. Dean, Sec.-Treas., will erect warehouse on Jackson Ave.; 216x180 ft.; composition roof; concrete floors; solid brick walls; A. B. Baumann, Archt., Knoxville; bids opened. (Lately noted.)

Va., Richmond—Davis Bros., Inc., will erect warehouse on Summit Ave.; cost \$30,000; 1 story.

BUILDING CONTRACTS AWARDED

Bank and Office

Fla., Jacksonville—W. J. Powers will remodel office building at 123 Main St., cost \$10,000; 3 stories; F. W. Updike, Contr., Jacksonville.

Ga., Atlanta—Atlanta Realty Corp., Joel Hurt, Pres., Hurt Bldg., will erect \$1,000,000 addition embracing 2 wings along Edge-wood Ave. and Exchange Place; 17 stories and basement; cover 20,000 sq. ft. lot; 13 elevators; Geo. F. Hurt Engineering Corp., 70 E. 45th St., and Hugh Tallant, 469 5th Ave., New York, Asso. Archts.; Realty Construction Co., Contr., 70 E. 45th St., New York. (Lately noted.)

Tenn., Dyersburg—Citizens and First National Banks will erect bank and office building; 8 stories; 50x80 ft.; first story faced with marble, balance faced on all 4 sides with face brick; stone or terra cotta trim; marble bank fixtures and floors; steel and hardwood interior trim; steam heat, 2 boilers; ash hoist; 2 elevators; 3 vaults; first story 20 ft. high with mezzanine floor; 4 one-story stores to occupy balance of lot 120x120 ft.; cost \$225,000; Raymond B. Spencer and Edwin B. Phillips, Asso. Archts., Goodwyn Institute Bldg., Memphis; D. D. Thomas & Sons, Contrs., Memphis; St. Louis Bank Fixtures Co., St. Louis, Mo., contract for fixtures. (Lately noted.)

Churches

N. C., Rutherfordton—Methodist Church J. O. Ervin, Pastor, will erect \$38,700 building; Hill & Justice, Contrs., Rutherfordton.

N. C., Wrightsville Sound—St. Andrew's Episcopal Church, Rev. Frank Deene, Pastor, will erect \$15,000 building; 34x48.9 ft.; brick and frame; composition shingle roof; wood floors; L. N. Boney, Archt.; U. A. Underwood, Inc., Contr., both Wilmington.

Tenn., Memphis—First Unitarian Church, Dr. Wm. A. Clark, Pastor, will erect parish house at Bellevue Blvd. and Vance Ave.; cost \$27,000; 1 story and basement; 150x160 ft.; brick veneer and stone; stone trim; H. J. Kramer, Archt.; J. E. Wright, Contr.; both Memphis.

Tex., Calvert—Methodist Church will erect building; cost \$17,871; W. A. McArdle, Contractor, San Antonio; Graham & Collins, San Antonio, electrical work; Allen & Townsend, Calvert, plumbing.

Va., Blackstone—Crenshaw's Methodist Church will erect \$22,500 Sunday school building; brick; R. W. Cobbs, Contr., Blackstone. (Previously noted.)

Va., Clifton Forge—Presbyterian Church will erect Sunday school building; cost \$50,000; brick and stone; terra cotta trim; Harrison Construction Co., Contr., Petersburg.

W. Va., Kanawha City (P. O. Libow)—Catholic Church will erect building on MacCorkle Ave., between 21st and 22nd Sts.; 60 x37 ft.; seat 250; Jos. Byrne, Contr., Charleston.

City and County

Fla., Cross City—Courthouse—Dixie County Commrs., W. T. Green, Chrmn., will erect courthouse; S. J. Welch, Archt., Pensacola; Geo. W. Livingston, Contr. (Lately noted.)

Tex., Brenham—Jail—Washington County Commrs. Green Morgan, County Clk., will erect jail and install steel cages and appurtenances; cost \$38,000; 3 stories and basement; brick; steam heat; Southern Steel Co., Archt.-Contr., San Antonio, and 614 Slaughter Bldg., Dallas. (Lately noted.)

Tex., Canyon—City Hall—City will erect \$20,000 building; brick; Jim Reeves, Contr., Canyon.

Tex., Houston—Zoo—City, O. F. Holcombe, Mayor, will erect monkey house at city zoo, Cleveland Park; cost \$11,755; 50x50 ft.; brick and concrete; composition roof; concrete and cork floors; W. A. Dowdy, City Archt., 207 City Hall; M. C. Parker & Co., Contrs., 612 West Bldg.; both Houston. (Lately noted.)

Dwellings

Fla., Miami Beach—Andrew B. McGown, Worcester, Mass., will erect \$10,000 dwelling; 30x36 ft.; concrete block; built up roof; wood floors; Martin L. Hampton, Archt.; Mead Construction Co., Contr.; both Miami. (Lately noted.)

Fla., Miami Beach—J. V. Daniels will erect residence and garage at 1023 Pennsylvania Ave.; cost \$24,750; A. B. Wade & Sons, Contractors.

Fla., Miami Beach—George Cahoon will erect dwelling at 4211 Collins Ave.; cost \$14,950; Beach Construction Co., Contr., Miami Beach.

Fla., Palm Beach—Stiles C. Hall, West Palm Beach, has contract to erect 3 dwellings; cost \$25,000; Spanish architecture.

La., New Orleans—Lillian Ringe will erect \$12,500 residence at Pershing and Pitt Sts.; E. A. Lagasse Co., Contrs.

La., New Orleans—J. P. Henichan will remodel residence at St. Charles and Peters Ave.; J. A. Haase, Jr., Contr., New Orleans.

La., New Orleans—C. T. Alpaugh will erect residence at Walnut and General Hoods Sts.; cost \$20,000; 2 stories; frame; Moise H. Goldstein, Archt., Hibernia Bank Bldg., New Orleans.

La., New Orleans—Sidney T'laspoller, 1312 Louisiana Ave., will erect \$12,133 dwelling; 69x27.6 ft.; slate roof; concrete and wood floors; interior tile; gas steam radiation heat; electric lights; C. M. Williams, Archt., Canal Commercial Bldg.; Jno. M. Werling, Contr., 1934 Dauphine St.; both New Orleans.

La., New Orleans—J. V. Gaudet will erect residence, Calhoun and S. Robertson Sts.; costs \$10,900; H. L. Burton, Archt.; A. G. Babin Sons, Contrs.; both New Orleans.

Md., Baltimore—D. S. Sanner, 2612 N. Calvert St., will erect dwelling at Canterbury Road and S. 40th St.; cost \$20,000; 38x50 ft.; 3 stories; hollow tile and stucco; slate roof; hot water heat; Jno. H. Sier, Archt., 3705 Chatham Rd.; Annex Construction Co., Contr.; both Baltimore.

Md., Baltimore—Edw. D. Donnelly will erect 2½-story brick residence on St. Paul St. near Millbrook Road; cost \$30,000; 54x29x33 ft.; Edw. L. Palmer, Jr., Archt., 513 N. Charles St.; L. L. Chambers, Contr., 36th St. and Roland Ave.; both Baltimore.

Md., Baltimore—Brothers & Kloess, 1710 E. Eager St., will erect 5 two-story brick dwellings, northeast corner Montpelier and Van Buren Sts.; cost \$18,500; 18x32 ft.; J. A. Deeter, Contr.

N. C., Kings Mountain—J. D. Smith will erect residence; cost \$10,400; 54x46 ft.; frame and brick veneer; interior tile; slate roof; wood floors; Arcola heating system; knob and tube system of lighting; W. H. Peeps, Archt., Charlotte; A. C. Miller, Contr., Gastonia.

N. C., Winston-Salem—C. A. Pratt will erect residence in West Highlands; C. W. Bryant, Contr., Winston-Salem.

S. C., Spartanburg—Dr. B. O. Hutchin-

son, Pres., Spartan Development Co., will erect \$10,000 to \$12,000 cottage in Woodburn Hills; J. Frank Collins, Archt.; P. S. Holt, Contr.; both Spartanburg.

Tenn., Memphis—Dr. W. A. Craig, Eudora, Ark., will erect residence at N. Parkway and Evergreen Sts.; cost \$27,500; Italian renaissance type; stucco; tile roof; terra cotta trim; J. Frazer Smith, Archt.; J. W. Yarbrough Co., Contr.; both Memphis.

Tex., Dallas—O. D. Adams will erect \$13,500 duplex dwelling, 3901-5 Gaston Ave.; oak floors; tile baths; Fred C. Herbst, Contr., Dallas.

Tex., Dallas—J. C. Clark will erect dwelling at 2535 Park Row; 1 story; brick veneer; hardwood floors; C. D. Mutsell, Contr., Dallas.

Tex., Dallas—Ed. Lammers will erect \$175,000 residence on Gaston Ave.; 2 stories; brick veneer; Bertram Hill, Archt.; E. R. Burget, Contr.; both Dallas.

Tex., Dallas—R. P. Vivian will erect \$10,000 duplex dwelling in 400 block 5th St.; brick veneer; stone trim; shingle roof; hardwood and edge grain floors; E. J. Moffitt, Contr., Dallas.

Tex., Houston—W. E. Japhet, 2600 Hopkins St., will erect \$12,000 dwelling; 9 rooms; brick veneer; Geo. T. Brown Co., Contr., 4518 Main St. Houston.

Tex., Mineral Wells—M. W. Hester will erect residence; 2 stories; A. B. Withers, Archt., Mineral Wells; Witherspoon & Hayes, Contrs., Houston.

W. Va., Welch—Green & Stowe have contract to erect \$10,000 dwelling; 8 rooms; Kingsport rough face brick; composition shingle roof; hot water heat.

W. Va., Welch—Sam Polon will erect three 6-room and bath dwellings; total cost \$10,000; frame; composition shingle roof; oak floors; Alex. B. Mahood, Archt., Bluefield; Green & Stowe, Contrs., Welch.

Government and State

Va., Norfolk—Armory—City will erect \$58,500 armory; 148x102 ft.; brick and tile; concrete foundation; Trinidad Lake asphalt roof; wood block floors; steam heat, \$6000; lighting, \$800; K. L. Hullsick Co., Archt., Flat Iron Bldg., Norfolk. Address Miller Engineering Corp., Contr., 1012 Water St., Norfolk. (Lately noted.)

Hospitals, Sanitariums, Etc.

Fla., St. Petersburg—City, A. R. Welch, Chmn., Mound Park Hospital Board, will erect \$68,000 addition at 6th Ave., South; 2 stories; 40x161 ft.; hollow tile and stucco; slab floors and roof; Henry Taylor, Archt.; Edgar W. Weeks, Contr., 1095 Osborne Place; H. C. Corbin, plumbing; Hollowell & Bourne, electrical work; A. J. Pendergrass, painting; all St. Petersburg.

Tex., Houston—Baptist Sanitarium will erect women's and children's addition; cost \$370,000; 7 and 8 stories; R. D. Steel, Archt.; Henger & Chambers, Contrs.; both Houston.

Tex., Jacksonville—Cherokee Sanitarium will erect \$20,000 building; 2 stories and basement; brick; C. W. Marshall, Contr., Jacksonville.

Hotels and Apartments

Ala., Gadsden—Printup Hotel, O. P. Reich, Mgr., will improve hotel; cost between \$40,000 and \$50,000; will add 21 rooms; making a total of 132; outdoor tea-garden; banquet hall and ball room; 3 rental offices; barber shop; high-speed elevator; M. J. Loyd, Contractor, Gadsden. (Lately noted.)

Fla., Orlando—Eola Cottage Hotel Co.,

In writing to parties mentioned in this department it will be of advantage to all concerned if the Manufacturers Record is mentioned.

will erect building on Magnolia Ave; cost \$40,000; 33 bed rooms; sun parlors; Frank L. Ferguson, Contr., 33 W. 42nd St., New York.

Fla., Sarasota—Andrew McAnsh will erect \$350,000 hotel and casino; Wm. G. Kreig, Archt., 111 W. Washington St., Chicago; G. A. Miller Construction Co., Contr., Tampa. (Lately noted.)

Ky., Bowling Green—Dr. T. O. Helm will erect hotel to be known as Morehead Hotel, lately noted; cost \$150,000; 110 rooms; brick; composition roof; 75x150 ft.; marble, pine and maple floors; steam heat, \$10,000; Weber & Weber, Archts., Cincinnati; Forbes Manufacturing Co., Contr., Hopkinsville, Ky. (See Machinery Wanted—Lighting Fixtures; Furniture.)

Tex., Brownwood—Southern Hotel to erect 2-story addition; A. C. Bratton, Contr., Brownwood.

Va., Richmond—A. B. Locke will erect 2 apartment houses; 40x45x42 ft.; 3 stories; brick; slate roof; hot water heat; wood floors; A. B. Locke, Contr., Richmond.

W. Va., Welch—Green & Stowe have contract to erect \$18,000 apartment house; 4 stories; 28x46 ft.; Kingsport rough face brick; composition shingle roof.

Miscellaneous

N. C., Charlotte—Club House—Woman's Club, Mrs. Wm. T. Shore, Pres., will erect building on Dilworth road; cost \$35,000; 100x200 ft.; 2 stories; Italian architecture; stucco; auditorium to seat 300; banquet hall; private, dining rooms; kitchen, janitor room, boiler room, fuel room, and storage, Chas. C. Hook, Archt.; Blythe & Isenhour, Contractors; both Charlotte. (Lately noted.)

Schools

Ala., Bessemer—Board of Education will erect school for negroes on 6th Ave. and 27th St.; cost \$20,000; auditorium to seat 800; Holley & Davis, Contrs., Birmingham. (Lately noted.)

Fla., Panama City—Board of Education. will erect school; 4 rooms; G. B. Jones, Contr.; G. C. Newberry, plumbing.

Fla., St. Cloud—Osceola County School Board, C. E. Yewell, Supt., Kissimmee, will erect high school; cost \$45,000; 120x107 ft.; 2 stories and basement; hollow tile and stucco; built-up roof; wood and concrete floors; P. C. Samwel, Archt., Winter Park, Fla.; P. E. Morgan, Contr. St. Cloud. (Lately noted.)

Fla., Sulphur Springs—Board of Education will erect school; brick; 4 class rooms; M. Leo Elliott, Archt., Tampa; J. A. Foxworth, Contr.

Ky., Owensboro—Board of Education will erect football stadium; cost \$10,000; 200x30 ft.; 10 rows seats reinforced concrete, with bolted on wood seats; concrete floors; city current; A. F. Hussander, Archt., 25 N. Dearborn St., Chicago; Hafner Construction Co., Contr., Owensboro.

La., Crew Lake—Richland Parish School Board, E. E. Kebler, Supt., Rayville, will erect building; cost \$45,000; brick; J. W. Smith, Archt., Monroe, La.; O. G. Sims, Contr., Lake Village, Ark. (Lately noted.)

La., Harrisonburg—Board of Education will erect school; cost \$67,000; 14 class rooms, auditorium, cafeteria; J. W. Smith, Archt., Monroe, La.; J. C. Corbin, Contr., Napoleonville, La.

Md., Damascus—Board of Education will

erect school; cost \$19,700; 30x56 classrooms; 40x60 addition; frame and stucco; tile roof; wood floors; steam heat, \$3000; L. P. Whert, Archt., Washington, D. C.; P. R. Souder, Contr., Damascus.

Miss., Brookhaven—Board of Education, W. D. Davis, Sec., will erect high school; cost \$125,000; 200x125; brick and frame with stone trim; composition roof; wood and concrete with tile finish floors; vacuum system of steam heat; ventilators; vaults; Emmett J. Hull, Archt.; W. J. McGee, Contr.; both Jackson. (Lately noted.)

Mo., Kennett—Board of Education will erect addition to high school; wing on each end of main building; cost \$38,000; 26x60 ft.; 2 stories and basement; brick; Carey built-up roof; wood and concrete floors; Wm. B. Itner, Archt., St. Louis; Bowyer-Aldous & Brewer, Contr., Kennett. (Lately noted.)

Mo., Sedalia—Board of Education will erect Summit School; cost \$85,000; Davis-Phillips Construction Co., Contr., Columbia, Mo.

Mo., Willow Springs—Board of Education, J. C. B. Davis, Pres., will erect \$40,000 high school; Heckenlively & Mark, Archts., Springfield, Mo.; J. O. Brown, Contr., Willow Springs. (Lately noted.)

N. C., New Bern—Board of Education will erect school for negroes; cost \$10,000 105x57 ft.; R. L. Blalock, Contr., Kinston.

N. C., Scotland Neck—School Board, R. A. Phillips, Sec., will erect \$35,000 high school; brick and frame; hollow fireproof tile, composition shingle roof; wood and concrete floors; 1 pipe steam heating plant; local current for lighting; E. F. Taylor, Contr., Goldsboro, N. C.; L. N. Boney, Archt., Wilmington, N. C. (Lately noted.)

N. C., Weldon—Colored School, W. W. Wiggins, Chmn., Bldg. Comm., will erect school; cost \$21,400; 6 rooms and auditorium; brick veneer; composition shingled roof; wood floors; hot water heat, cost \$1150. Weldon Sheet Metal Works, Weldon; Electric lights, \$285, Electrical Maintenance Co., Wilmington; Leslie N. Boney, Archt., 412 Murchison Bldg., Wilmington; Jewell & Riddle Co., Contr., Sanford. (Lately noted.)

S. C., Chester—Trustees Chesterfield School, W. P. Odom, Chmn., will erect annex to high school; cost \$23,000; 8 classrooms; toilet rooms and teachers' rest rooms; brick and frame; Barrett roof; wood floors; stoves; W. D. Harper, Archt.; W. P. Tennent, Contr., both Florence, S. C. (Lately noted.)

S. C., Heath Springs—Board of Education will erect school; cost \$50,000; brick; 2 stories; 9 class rooms; auditorium; Blair & Reager, Contrs., Chester, S. C.

S. C., Marion—School Board; H. Mullins, Chmn., will erect \$100,000 school; W. J. Wilkins & Co., Archts., Florence, S. C.; J. F. McBride, Contrs., Cheraw, S. C.; Bryce & Co., Florence, contractors for heating and plumbing. (Lately noted.)

S. C., Williamston—Williamston Mills will erect \$17,000 school; 1 story; 4 classrooms and auditorium; brick; terra cotta trim; tin roof; pine floor; A. E. Holman, Engr.; C. M. Guest, Contr., Anderson, S. C. (Lately noted.)

Tenn., Knoxville—Lewis S. Pope, Commr. of State Institutions, Nashville, will erect school, dormitories, power plant, etc. at School for Deaf and Dumb on Island Home property; Marr & Holman, Nashville, and Barber & McMurray, Knoxville, Asso. Archts.; V. L. Nicholson, Contr., Knoxville. (Lately noted.)

Tenn., Shelbyville—City and Bedford County will erect \$32,500 joint high school, between Dozier Ave., and Union St., East Shelbyville; F. P. Hix, Contr.

Tex., Abilene—Simmons College, C. M. Caldwell, Pres. Board of Trustees, will erect \$125,000 dormitory; accommodate 125 men; 3-room suites, consisting of studio and 2 single bedrooms with bath; R. C. Lewis, Contr. (Lately noted.)

Tex. Blossom—Independent School Distr., will erect school; cost \$35,000; 72x106 ft.; concrete, brick, steel, etc.; tin or composition roof; hardwood floors; electricity; metal ceilings; concrete floors; ventilators; Barry & Smith, Archts., Paris, Tex.; Huikay & Son, Contrs.; heat, light and plumbing contracts let about Sept. 1.

Tex., Mathis—School Trustees will erect 4 room addition to building; 44x54 ft.; brick and tile; wood shingle roof; wood floors; W. C. Stephenson, Archt., Beeville, Tex.; Charles Newman, Contr., Kenedy, Tex. (Lately noted.)

Tex., Pattison—School Board will erect building in Dist. No. 14; cost about \$10,000; 44x65; brick; composition roof; wood floors; stoves; Alfred C. Finn, Archt., Houston; Albert Moverick, Contr., Goose Creek, Tex. (Lately noted.)

Tex., San Antonio—School Board will erect \$36,800 school at Austin and Mason Sts.; J. Dupuy, Contr., Bedell Bldg., San Antonio. (Lately noted.)

Tex., San Antonio—Weslyan Institute will erect building in West End; cost \$50,000; semi-fireproof; 48x125 ft.; 3 stories; wing 60x24 ft.; brick and concrete; built-up roof; wood and concrete floors; plaster board; concrete floors; ventilators; ornamental terra cotta; steam heat, \$5380, Kirkwood & Wharton; conduit lighting, \$750, Crowther Electric Co.; Phelps & DeWees, Archt.; C. J. Gates, Contr.; both San Antonio. (Lately noted.)

W. Va., Wheeling—St. Alphonsus' Parochial School will erect addition to building on 2103-2104 Main St.; Andrew Prudhouse, Contr., Wheeling.

Stores

Ala., Montgomery—I. Silver & Bros. Co., will remodel store; cost \$15,000; 52x132 ft.; 3 stories and basement; steam heat; Okel & Cooper, Archts., Hugger Bros. Construction Co., Contrs., both Montgomery. (Lately noted.)

Fla., West Palm Beach—F. W. Woolworth Co., will erect \$38,000 store on Clematis Ave.; 2 stories; 50x150 ft.; plate glass and terra cotta front; rest of building of brick with steel columns and girders; H. A. Carpenter, Archt.; Franklin J. Masop, Contr.; both St. Petersburg. (Lately noted.)

La., New Orleans—Maison Blanche Co. will erect \$283,355 annex at Iberville and Burgundy Sts. for service department, warehouse, etc.; 4 stories; 186x195 ft.; reinforced concrete and flat slab construction; sprinkler system; elevators; electric lights; Emile Weil, Archt., Whitney Central Bldg.; J. V. & R. T. Burkes, Contrs.; both New Orleans. (Lately noted.)

La., New Orleans—United Cotton Realty Co. will remodel building at 309-311 Baronne St.; cost \$35,000; composition roof; hardwood floors; Weiss & Dreyfous, Inc., Archts.; E. W. Ulrich Glass Co., Inc., Contr., both New Orleans. (Lately noted.)

Mo., Springfield—W. W. Johnson, Springfield, has contract to complete 2 story business block on St. Louis St.; brick, tile and reinforced concrete; 1st floor for store rooms, 2nd floor for offices or apartments.

In writing to parties mentioned in this department it will be of advantage to all concerned if the Manufacturers Record is mentioned.

N. C., Charlotte—Charles P. Moody, will erect stores on East 4th St.; cost \$32,000; 4 stores; 72x142 ft.; brick; 2 stories; Louie H. Asbury, Archt.; R. H. Hunter, Contr.; both Charlotte.

N. C., Wilmington—E. Y. Davis will erect hardware store; cost \$15,000; metal ceilings; metal doors; ornamental terra cotta; steel sash and trim; 34x64.6 ft.; semi-fireproof; Barber asphalt roof; hardwood floors; wire glass; Leslie N. Boney, Archt.; U. A. Underwood, Inc., Contr., both Wilmington.

S. C., Greenville—C. O. Allen will erect building at East Washington and Spring Sts., cost \$85,000; fireproof; 3 stories; 60x116 ft.; reinforced concrete frame; brick; panels; 20 year Barrett roof, 5 ply; conduit lighting, cost \$3000; Otis elevators, \$3500; hollow fireproof tile; interior tile; metal doors; concrete floors; vault lights; steel sash and trim; J. E. Sirrine & Co., Archts.; Potter & Shackelford, Inc., Contrs., both Greenville.

Tex., Austin—Frank R. Rundell, Contr., 906 W. 26th St., was awarded contract for construction of store at 6th and Guadalupe Sts.; 1 story; brick.

Tex., Dallas—C. E. Cory will erect 1-story brick business house on Bryan St., cost \$13,000; 50x100 ft.; E. A. Abbott, Sr., Contr., Dallas.

Tex., Dallas—Easterwood & Felder will erect store at 409-13 South Akard St.; cost \$10,000; 1 story; brick; W. B. Jansen, Contr., Dallas.

Tex., San Antonio—Mrs. Johana Steves will erect \$50,000 building for 7 stores and garage; 158x155 ft.; brick walls; frame roof construction; Barrett 20-yr. roof; cement and tile floors; ventilators; wire glass; Will N. Noonan, Archt., 240 Moore Bldg.; C. H. Briant, Contr.; both San Antonio. (Lately noted.)

W. Va., Wheeling—C. H. Becker will erect store at 1054 Market St.; cost \$30,000; 4 stories; steel construction; brick and stone; 125x22 ft.; Edward Handy, Contr.

Theatres

Fla., Delray—Delray Theater Co., Inc., E. N. Scott, Pres., will erect \$25,000 theater; 40x50 ft.; hollow fireproof tile; concrete floors; metal ceilings; metal doors; ventila-

tors; ornamental terra cotta; steel sash and trim; wire glass; L. H. Walker, Contr.; Martin L. Hampton, Archt., New Congress Bldg., Miami, Fla. (Lately noted.)

Warehouses

Fla., Tampa—Perry Paint & Glass Co., will erect warehouse on Whiting St. and Nebraska Ave.; 110x80 ft.; cost \$20,000; Logan Brother, Contrs., Tampa.

Ga., Bolton—National Paper Co., will erect warehouse; brick; concrete; tar and gravel roof; West Point Iron Works, Horace Lanier, Pres., Contr., West Point, Va.

Ky., Auburn—Dark Tobacco Growers Co-operative Asso., Owensboro, Ky., will erect warehouse, cost \$31,000; 150x196 ft.; brick and steel; built-up composition roof; wood floors; Manley & Young, Archts., Knoxville, Tenn.; Peart & Lancaster, Contrs., Auburn. (Lately noted.)

Miss., Biloxi—Barber Lumber Co., will erect warehouse; Manuel & Wetzel, Contrs., Biloxi.

MACHINERY, PROPOSALS AND SUPPLIES WANTED

Bank Fixtures.—Bank of Berkeley Springs, V. E. Johnson, Pres., Berkeley Springs, W. Va.—Marble and bank fixtures and equipment.

Barges.—United States Engr. Office, Montgomery, Ala.—Bids until Sept. 10 for three 80x26x5 ft. and three 60x22x4 ft. steel barges.

Blackboards.—A. J. Gaudet, Chmn., Bldg. Comm., St. Ann's Parochial School, 1209 N. Galvez St., New Orleans, La.—Bids on blackboards for school.

Boiler.—Louisiana State University, L. R. Hames, Sec., Building Committee, Baton Rouge, La.—Bids until Aug. 31 for two 300 horse power horizontal water tube boiler.

Boilers (Water Tube).—See Turbine (Steam.)

Box (Paper) Making Machines.—J. M. Robertson, Bloomsburg No. 6, Raleigh, N. C.—To correspond with manufacturers of paper box making machines.

Boxes (Corrugated Fibre).—Southern Glass Co., Bastrop, La.—Prices on corrugated fibre boxes.

Breakwater Construction.—U. S. Engineer Office Honolulu, T. H.—Bids until Oct. 15 to construct breakwater construction, Hilo Harbor, T. H.; plans on file or with U. S. Engineer office, 410 Customhouse, San Francisco, Cal.

Bridge.—City of West Palm Beach, Fla. Details under Construction News—Bridges, Culverts and Viaducts.

Bridge.—City of Canadian, Tex. Details under Construction News—Bridges, Culverts and Viaducts.

Bridge.—Louisiana Highway Comsn., Raymond Building, Baton Rouge, La. Details under Construction News—Bridges, Culverts and Viaducts.

Bridge.—City of Baton Rouge, La.—Details under Construction News—Bridges, Culverts and Viaducts.

Bridge.—Columbia, Tenn. will build 2 bridges. Details under Construction News—Bridges, Culverts and Viaducts.

Bucket (Clam Shell).—Pennsylvania Equipment Co., (Mchy. Dealers), Norwood Station, Pa.—One second-hand 1 yd. clam shell bucket to be used with double drum Brown hoist crane.

Button Hole Machines.—See Sewing (Electric) Machines, etc.

Building Material.—A. J. Gaudet, Chmn., Bldg. Comm., St. Ann's Parochial School, 1209 N. Galvez St., New Orleans, La.—Bids on building material to include concrete, steel reinforcement, floor and roof construction, masonry, mortar, millwork, sheet metal work, structural steel and iron work, tiling, glazing, plastering and cement, etc., to complete school building.

Car.—Frank Davies (Sales Representative) Box 1566, New Orleans, La.—Standard gauge, private car for personal use by General Mgr. short line railroad, state complete specifications.

Cars (Dump).—Hackley Morrison Co., Inc., (Mchy. Dealers) 1708 Lewis St., Richmond, Va.—Twenty-five 4-yd. Western side dump cars, 36-in. gauge.

Cement (Portland).—State Highway Com., Jefferson City, Mo.—Bids until Sept. 28 for Portland cement for road building during next five years; also for erection of cement plant.

Concrete.—A. J. Gaudet, 1209 N. Galvez St., New Orleans, La.—See Building Material.

Conveyers.—See Mining (Feldspar Equipment, etc.

Cotton Rope.—Greene County Ginning & Cotton Co., Boligee, Ala.—Data and prices on the manufacture of cotton rope.

Crushers.—See Mining (Feldspar) Equipment, etc.

Drainage.—A. J. Gaudet, Chmn., Bldg. Comm., St. Ann's Parochial School, 1209 N. Galvez St., New Orleans, La.—Bids on drainage in connection with school building.

Drainage.—Comms. of Sevier Lake Drainage Dist. of Coahoma County, Clarksdale, Miss. Details under Construction News—Drainage and Irrigation.

Dredging.—U. S. Engineer Office, Galveston, Tex. Details under Construction News Miscellaneous Construction.

Drill.—Price Brothers, Inc., Corner Church and Second Sts., Frederick, Md.—New or second-hand, 6 spindle drill to pull 1/2-in. drills.

Drilling Machines.—See Stamping (Aluminum) Machines, etc.

Drinking Fountains.—A. J. Gaudet, Chmn., Bldg. Comm., St. Ann's Parochial School, 1209 N. Galvez St., New Orleans, La.—Bids on drinking fountains for school building.

Electric Light Equipment.—City of Bolivar, Mo., W. E. Rice, Mayor.—Prices on electric light equipment.

Electric Light Plant.—City of Washington, La. Details under Construction News—Electric Light and Power Plants.

Electrical Fixtures.—A. J. Gaudet, Chmn., Bldg. Comm., St. Ann's Parochial School, 1209 N. Galvez St., New Orleans, La.—Bids on electrical fixtures for school.

Electrical Fixtures.—Hall County, A. C. Hoffman, Judge, Memphis, Tenn.—Bids until Sept. 11 for electrical fixtures for courthouse; plans at office of C. H. Page & Bro., Archts., Austin.

Electric Welding Outfit.—M. B. Parker, Chattanooga, Tenn.—Data and prices on electric welding outfit, suitable for making locomotive boiler repairs.

Engine.—Pennsylvania Equipment Co. (Mchy. Dealers) Norwood Station, Pa.—One 44x84x60-in. cross head blowing engine.

Engine.—C. M. Wall & Son, Lexington, N. C.—To purchase left hand Corliss engine that will develop from 300 to 375 h.p. under 110 to 120 steam pressure; state condition and location for inspection.

Engine (Corliss).—Love Field Potteries, Inc., Dallas, Texas.—One 60 h.p. Corliss engine; second hand; in good running condition.

Engines (Oil).—City of Bolivar, Mo., W. E. Rice, Mayor.—Prices on standard oil engines.

Fire Escape.—J. M. Fry, Chmn., Bldg. Committee of Board of Trustees, Henderson, Tenn.—Iron fire escape for \$15,000 school.

Flooring.—A. J. Gaudet, Chmn., Bldg. Comm., St. Ann's Parochial School, 1209 N. Galvez St., New Orleans, La.—Bids on flooring for school building.

Floor Polishing Machines.—Durham Public Service Co., F. P. Bowie, Sales Representative, 215 E. Main St., Durham, N. C.—To purchase floor polishing machines for wood and tile floors.

Furniture.—Hall County, A. C. Hoffman, Judge, Memphis, Tenn.—Bids until Sept. 11 for equipment for courthouse to include mov-

In writing to parties mentioned in this department it will be of advantage to all concerned if the Manufacturers Record is mentioned.

able furniture, pews, linoleum, etc.; plans at office C. H. Page & Bro., Archts., Austin.

Furniture.—Dr. T. O. Holm, Jr., Bowling Green, Ky.—Furniture for \$150,000 hotel.

Fly Wheel.—Wilson-Hock Co. (Mchy. Dealers) City Point, Va.—Corliss fly wheel approximately 20 ft. diam., 12-in. face, 14-in. bore, weighing about 20 tons.

Generators.—See Mining (Feldspar) Equipment, etc.

Glazing.—A. J. Gaudet, Chmn., Mldg. Comm., St. Ann's Parochial School, 1209 N. Galvez St., New Orleans, La.—Bids on glazing for school building.

Handle (Wood) Machinery.—J. M. Torrence, 170 Trinity Ave., Atlanta, Ga.—To purchase machine to shape handles for hammers.

Heating Equipment.—Louisiana State University, L. R. Hames, Sec. Building Committee, Baton Rouge, La.—Bids until Aug. 31 for heating equipment for Hill Memorial Library.

Heating Plant.—Granville County Commrs., C. G. Powell, Clk., Oxford, N. C.—Bids for remodeling heating of courthouse and jail; plans and specifications at office Frank B. Simpson, Archt., Raleigh.

Heating Plant.—H. B. Davis, Brookhaven, Miss.—Heating plant for \$26,000 hotel.

Heating Plant.—Muskogee County Commissioners, W. H. Harrower, Chmn., Muskogee, Okla.—Bids until Sept. 4 for heating plant for one story county farm bldg.; plans and specifications at office M. T. Harding, Archt., Equity Bldg., Muskogee, and Lewis F. Kipp, County Clk.

Heating Plant.—A. J. Gaudet, Chmn., Bldg. Comm., St. Ann's Parochial School, 1209 N. Galvez St., New Orleans, La.—Bids on heating plant for school.

Hemstitching Machines.—See Sewing (Electric) Machines, etc.

Hoists.—See Mining (Feldspar) Equipment, etc.

Hollow Tile.—R. S. Glenn, Cisco, Tex.—Hollow tile, f.o.b. Spur, Tex., for \$40,000 school.

Hose (Fire) and Couplings.—City Commissioners, Tampa, Fla.—Bids until Aug. 28 for 3000 ft. of 2½-in. rubber lined fire hose, coupling to fit City of Tampa fire hydrants.

Hydrants.—A. J. Gaudet, Chmn., Bldg. Comm., St. Ann's Parochial School, 1209 N. Galvez St., New Orleans, La.—Bids on hydrants for school.

Ice Making Machines.—F. M. Coffin, Citra, Fla.—To correspond with manufacturers of small ice machines, capacity 1 ton or less.

Lighting Equipment.—Louisiana State University, L. R. Hames, Sec. Building Committee, Baton Rouge, La.—Bids until Aug. 31 for lighting equipment for Hill Memorial Library.

Lighting Fixtures.—Dr. T. O. Helm, Jr., Bowling Green, Ky.—Lighting Fixtures for \$150,000 hotel.

Lime (Ground Burned).—Southern Glass Co., Bastrop, La.—Prices on ground burned lime used in the manufacture of bottles, etc.

Lockers.—R. S. Glenn, Cisco, Tex.—Steel lockers, f.o.b. Spur, Tex., for \$40,000 school.

Masonry.—A. J. Gaudet, 1209 N. Galvez St., New Orleans, La.—See Building Material.

Millwork.—A. J. Gaudet, Chmn., Bldg. Comm., St. Ann's Parochial School, 1209 N. Galvez St., New Orleans, La.—Bids on millwork for school.

Mining (Feldspar) Equipment, etc.—Moneta Mineral & Mining Co., Moneta, Va.—

Prices on generator, hoists, conveyors, grizzlies, crushers, turbine, one mill unit complete, and probably a few portable houses.

Miscellaneous Supplies.—Panama Canal, A. L. Flint, General Purchasing Officer, Washington, D. C.—Bids until Sept. 24 to furnish steel cable; iron, copper and brass sheets; special bronze, pig lead; bolts; jacks; storage batteries; tackle blocks; air hose; magnesia pipe covering, tires and tubes; salt water soap; creosoted Southern yellow pine bridge ties; etc. Blank forms and information (Circular 1553) on application to offices of Panama Canal; Asst. Purchasing Agt. at Fort Mason, San Francisco, Cal.

Miscellaneous Supplies.—Panama Canal, A. L. Flint General Purchasing Officer, Washington, D. C.—Bids until Aug. 31 to furnish electric welding wire; flexible conduit; lead pipe; range boilers; bolts; twist drills; valves; pipe taps; thumb tacks; fiber packing; varnish brushes; chamois skins; rubber bands; lumber crayons; note books, etc. Blank forms and information (Circular 2330) on application to offices of Panama Canal; Asst. Purchasing Agt. at Fort Mason, San Francisco, Cal.

Motors (Electric).—Wilson-Hock Co., (Machinery Dealers) City Point, Va.—Four 3 phase, 60 cycle, 2200 volt, 1800 r.p.m. electric motors suitable for direct connection; bases or starting equipment not necessary; one 3 phase, 60 cycle 2200 volt, 100 h.p. 1800 r.p.m. motor desired with starting equipment.

Oil Cloth Machinery.—A. R. McDaniel, Calhoun, Ga.—Data and prices on machinery for the manufacture of oil cloth.

Paving.—City of Greensboro, N. C. Details under Construction News—Road and Street Construction.

Paving.—City of Washington, D. C. Details under Construction News—Road and Street Construction.

Paving.—A. J. Gaudet, Chmn., Bldg. Comm., St. Ann's Parochial School, 1209 N. Galvez St., New Orleans, La.—Bids on paving in connection with school building.

Paving.—City of Greenville, Tex. Details under Construction News—Road and Street Construction.

Plumbing.—Granville County Commrs., C. G. Powell, Clk., Oxford, N. C.—Bids for plumbing of courthouse and jail; plans and specifications at office Frank B. Simpson, Archt., Raleigh.

Plumbing.—A. J. Gaudet, Chmn., Bldg. Comm., St. Ann's Parochial School, 1209 N. Galvez St., New Orleans, La.—Bids on plumbing in connection with school building.

Plumbing.—Muskogee County Commrs., W. H. Harrower, Chmn., Muskogee, Okla.—Bids until Sept. 4 for plumbing in one-story county farm bldg.; plans and specifications at office M. T. Harding, Archt., Equity Bldg., Muskogee, and Lewis F. Kipp, County Clk.

Polishing (Stone) Machinery.—Shenandoah Caverns, H. B. Chapman, Woodstock, Va.—To purchase machinery to polish cave formations for paper weights and other novelties; wish complete outfit to finish stone from the rough.

Polishing Machines.—See Stamping (Aluminum) Machines, etc.)

Pre-Cooling Plant.—Hollywood Ice Co., Hollywood, Fla.—Prices on machinery for 8 car pre-cooling plant.

Pump (Centrifugal).—Wilson-Hock Co. (Mchy. Dealers) City Point, Va.—Second-hand 4 or 5-in. suction 4-in. discharge centrifugal pump 400 to 600 g.p.m., capacity against 80 ft. head; either belt or motor

driven pump suitable; motor to be 3 phase, 60 cycle, 220 volts.

Pumping Equipment.—Town Board of Alderman, Newton, N. C.—Bids until Sept. 4 to furnish 350-gal. per minute direct connected motor driven service pump to operate against a total head of 250-ft. and also one 1000 gal. per min. direct connected engine driven fire pump to operate against a total head of 365 ft.; plans obtainable from Clarence Clapp, City Clerk and Treas. also from Mees & Mees, Const. Engrs., Charlotte, N. C.

Pumps (Rotary).—Oil Products Co., Inc., 5th and Jefferson Sts., Lexington, Ky.—3000 gal. capacity gasoline and kerosene rotary pumps to replace Blackmer rotary pump size No. 4.

Punch Press.—Price Brothers, Inc., Corner Church and Second Sts., Frederick, Md.—One punch press, capable of blanking a disc 4-in. diam. x 3/16-in. thick.

Rails and Accessories.—D. C. Elphinstone, (Mchy. Dealers) 408 Continental Bldg., Baltimore, Md.—3000 ft. of 36-in. gauge, 25 lb. portable industrial track; six 36-in. turnouts; delivery Maryland.

Road.—Clarksburg, W. Va. will build 3 roads. Details under Construction News—Road and Street Corporation.

Road.—City of Newton, Tex. Details under Construction—Road and Street Construction.

Road.—Town of Abbeville, La. Details under Construction News—Road and Street Construction.

Road.—City of Montgomery, Ala. Details under Construction News—Road and Street Construction.

Roofing.—A. J. Gaudet, Chmn., Bldg. Comm., St. Ann's Parochial School, 1209 N. Galvez St., New Orleans, La.—Bids on roofing for school building.

Sand (Silica).—Southern Glass Co., Bastrop, La.—Prices on silica sand used in the manufacture of bottles, etc.

Screws (Cap).—Marine Corps. Quartermasters Dept., Washington, D. C.—Bids until August 31 to furnish 12,150 hexagon heads, cap screws; delivery Marine Barracks, Quantico, Va.; Sch, 101.

Sewer.—City of Laredo, Tex. Details under Construction News—Sewer Construction.

Sewer.—City of Tuscaloosa, Ala. Details under Construction News—Sewer System.

Sewer.—City of Norfolk, Va. Details under Construction News—Sewer Construction.

Sewers.—City of Hollandale, Miss. Details under Construction News—Sewer Construction.

Sewers.—Washington Suburban Sanitary Comsn., Washington, D. C. Details under Construction News—Sewer Construction.

Sewers.—City of St. Petersburg, Fla. Details under Construction News—Sewer Construction.

Sewer System.—City of Grand View, Tex. Details under Construction News—Sewer Construction.

Sewing (Electric) Machines, etc.—Miss Eva Logan, Mgr., Logan Garment Co., Rutherfordton, N. C.—Prices on electric sewing, cutting, hemstitching, button sewing and button hole machines.

Soda Ash.—Southern Glass Co., Bastrop, La.—Prices on soda ash.

Sprinkler (Street) and Flusher.—City of Canton, Miss., P. H. Virden, Clerk.—Bids until Sept. 4 for combination street sprinkler and flusher.

Stamping (Aluminum) Machines, etc.—Chas. E. Navek, Const. Engr., Gulfport, Miss.—Machines for drilling, stamping and

In writing to parties mentioned in this department it will be of advantage to all concerned if the Manufacturers Record is mentioned.

polishing aluminum products, jigs, etc. T. M. Hughes.

Staple Driver.—Mohr-Jones Hardware Co., 319 Sixth St., Racine, Wis.—Data and prices on staple driver, to driving staples into screen doors and other light work.

Steel Rails (Relay).—Moneta Mineral & Mining Co., Moneta, Va.—Prices on 70 lb. relay steel rails and accessories.

Shear (Alligator).—Pennsylvania Equipment Co., (Mchy. Dealers) Norwood Station, Pa.—Second-hand alligator shear, to cut a maximum 3/8-in. x 8-in. about 12-in. blade, motor driven.

Sheet Metal Work.—A. J. Gaudet, 1209 N. Galvez St., New Orleans, La.—See Building Material.

Stone Cutting Equipment.—See Polishing (Stone) Machinery.

Structural Steel.—A. J. Gaudet, 1209 N. Galvez St., New Orleans, La.—See Building Material.

Tag Hook Machinery.—Blackwell Ashley, 1334 Tutwile Ave., Memphis, Tenn.—To correspond with manufacturers of machinery for making tag hooks.

Tag Hooks.—Blackwell Ashley, 1334 Tutwile Ave., Memphis, Tenn.—To correspond with manufacturers of Deadlock tag hooks.

Tank (Storage).—Greene County Ginning & Cotton Co., Boligee, Ala.—Prices on storage tank for crude oil of tank car capacity.

Tank and Tower (Steel).—The White Oak Corp., Box 1094, Knoxville, Tenn.—One good used steel tank and tower, capacity of tank 10,000 to 15,000 gals. and tower 80 to 100 ft. high; state price and condition.

Tanks (Gasoline).—Oil Products Co., Inc., 5th and Jefferson Sts., Lexington, Ky.—Four 1200 1500 gal. capacity graduating tanks for truck loading.

Textile.—Marine Corps, Quartermasters Dept., Washington, D. C.—Bids until Sept. 7 to furnish 50,000 yds. of blue, shrunk denim; delivery U. S. Marine Corp., 1100 S. Broad St., Phila., Pa.; Sch. 103.

Transformers.—Wilson-Hock Co. (Mchy. Dealers) City Point, Va.—Three out door transformers capacity 500 k.v.a. each, 13,200 volt high tension, 2200 low tension; several single phase 60 cycle transformers, requiring winding, three 37½ or 50 k.v.a. transformers preferred.

Transformers, etc.—Guyan Machine Shops, (Mchy. Dealers) Logan, W. Va.—Transformers, 2200 to 220,110 volts, three of each 10 k.v.a., 12½ k.v.a. complete with hangers, fuses and lighting arrestors.

Turbine.—See Mining (Feldspar) Equipment, etc.

Turbine (Steam).—Landa Milling Co., New Braunfelds, Tex.—500 to 750 k. w. steam turbine and water tube boilers necessary, ceter and water-tube boilers to match.

Vaults.—Wilson County, J. E. Canfield, Judge, Floresville, Tex.—Bids until Sept. 14 for building fireproof steel bound brick and concrete vault; plans by Southern Steel Co., San Antonio.

Water Works.—City of McAlester, Okla. Details under Construction News—Miscellaneous Construction.

Wheels (Disc and Spoke).—Baptist & Goode, Boynton, Va.—To purchase in lots of 1000, disc and good hickory spoke wheels, with axles and roller or ball bearings, for boys coaster wagons; will probably want wheels equipped for rubber tires.

Wire Fence.—Board of Awards, Howard W. Jackson, Pres., Baltimore, Md.—Bids until Sept. 5 to furnish and erect wire fence for Pikesville reservoir, Cont. 71; specifications on file at office Wm. A. McGraw, Water Engr., Room 204, City Hall.

Wreck Removal.—U. S. Engineer Office, Wilmington, N. C.—Bids until Sept. 20 for removing wreck of the schooner Josephin.

Yarn (Knitting).—Mrs. L. D. Tenney, 503 North Mesa Ave., El Paso, Tex.—Prices on knitting yarns in quantities.

Financial News

New Financial Corporations

Ala., Carbon Hill—Carbon Hill State Bank, capital \$25,000, incorporated by T. J. Wakefield, O. H. Whitney, W. S. Thornton.

Fla., Cross City—Dixie State Bank, capital \$20,000, incorporated with M. L. Fleschel, Pres.

Ky., Louisville—Chadwick Insurance Agency, capital \$25,000, incorporated by C. R. Chadwick, J. R. Richards and others.

Md., Baltimore—Star Building & Loan Assn., 616 Equitable Bldg., capital \$50,000, incorporated by Joseph Jacobs, Wm. Goldman and others.

Md., Baltimore—Century Trust Co. of Baltimore, capital \$500,000, organized with following directors Allan L. Carter, Frank J. Caughy, Adam Deupert, William J. Donnelly, Herman H. Duker, John B. H. Dunn, Isaac E. Emerson, Harry G. Evans, Frederick H. Gottlieb, John W. Hall, John Hinkley, Snowden Hoff, J. Monroe Holland, J. William Middendorf, John C. Muth, John Schoenwolf, James L. Sellman, John C. Talliaferro, T. Rowland Thomas, Peter E. Tome, Robert E. Tubman, John L. Whitehurst and Howard E. Young. (Lately noted as Emerson Trust Co.)

Miss., Laurel—Mississippi Finance & Insurance Co., capital \$250,000, incorporated by Charles Green, B. A. Schneider.

Miss., Shelby—Commercial Savings Bank, capital \$25,000, incorporated by H. E. Wilkerson, V. W. Holleman and others.

Mo., St. Louis—Lincoln Savings Trust and Loan Association, capital \$15,000,000, organized with following directors Ben G. Brinkman, Charles Hertenstein, T. A. Parker, H. P. Riefling and J. A. Lee all of St. Louis and Cornelius Roach, Pres. of Metropolitan Bank, Kansas City. (Conversion of the Lincoln Housing Trust.)

Mo., St. Louis—Realty Savings and Investment Co., capital \$12,000, incorporated by L. W. Robidoux, M. W. Garets and others.

N. C., Spencer—Fidelity Bank and Trust Co., capital \$100,000, incorporated by R. L. Young, P. Standemire, T. E. Johnson, M. L. Kiser and others. (Lately noted.)

Tenn., Chattanooga—E. L. Cook & Co., incorporated by E. L. Cook, W. J. Dobbs and others.

Tenn., Oneida—First Trust & Savings Bank, incorporated with capital \$25,000, A. J. Daniels, Cashier.

Tex., Farmersville—Collins County Building & Loan Assn., capital \$200,000, incorporated by W. A. Canon, J. E. Warden and others.

Tex., Fort Worth—Fort Worth Morris Plan Co., capital \$50,000, incorporated by H. B. Gately, M. L. Massingill and H. A. Wheelhouse.

Tex., Kirvin—State Guaranty Bank, capital \$17,600, incorporated with R. M. Thompson, Pres., Teague; J. M. Yancy, Cashier, Kirvin.

Tex., San Antonio—Central Building & Loan Assn., capital \$25,000, incorporated by E. E. Dix, H. J. Wooten and others.

Tex., Sudan—Sudan State Bank, capital \$17,500, incorporated with W. H. Furneaux, Pres.; J. C. Barron, Cashier.

W. Va., Morgantown—Morgantown People's Building & Loan Assn., incorporated by H. R. Cokely, R. C. Smith and others.

New Securities

Ala., Alabama City—Improvement—Etowah County Comrs. sold \$80,000 public improvement bonds to Ward, Sterne & Co., Birmingham.

Ala., Cordova—School—Town voted \$30,000. 5½% bonds, \$500 denom. Address School Board.

Ala., Wedowee—Road—Randolph County Comrs. sold \$25,000 road bonds to Ward, Sterne & Co., Birmingham, Ala. at par and accrued interest.

Ark., Fort Smith—Water—City will receive bids until Sept. 7 for \$250,000 5% water works bonds. D. L. Ford, Chmn., Fort Smith Water Works District, Fort Smith, Ark.

Ark., McGehee—Sewer—Town sold \$90,000 6% bonds to M. W. Elkins and Co., of Little Rock.

Fla., Fort Myers—School—J. D. McFerron, Supt., Board of Public Instruction will receive bids until Sept. 5 for \$60,000 6% Lee County Special Tax School District No. 1 bonds and \$20,000 6% Lee County Special Tax School District No. 14 Bonds.

Fla., Lake Butler—Road—Union County contemplates bond issue to improve roads to connect with the Macclenny road at Sapps Station. Address County Comrs.

Fla., Orlando—Road and Courthouse—Orange County sold \$680,000 5½% road bonds at a premium of \$4148 and \$150,000 5% courthouse bonds at a discount of \$6585 to Hanchett Bond Co., Chicago.

Fla., Panama City—Road—Bay County voted \$140,000 good road bond issue. Address County Comrs.

Fla., Sanford—Street—City sold \$151,000 bonds to Atlantic National Bank of Jacksonville at discount of \$3899.

Fla., Sebring—School—Highlands County Special School District No. 1 sold \$75,000 6% school bonds to Campbell & Co. of Toledo at a premium of \$1671.

Fla., Tallahassee—School—Tallahassee Special Tax School District will vote on \$150,000 bonds. Address District School Trustees.

Fla., West Palm Beach—Improvements—City, Geo. L. Wright, Mgr., voted \$220,000 bonds for additional sea wall on Lake Worth, athletic field, addition to parks, fire equipment, incinerator, etc. (Lately noted.)

Ga., Buena Vista—School—City sold \$30,000 bonds to Lowry Bank and Trust of Georgia, Atlanta, at \$30,027. (Lately noted.)

Ga., Homer—School—Homer School District, Banks County sold \$7500 6% school bonds to J. H. Hillsman & Co. of Atlanta.

Ga., Midville—School—Town voted \$50,000 school bonds. Address the Mayor.

La., Abbeville—Road—Vermillion Parish will receive bids until September 8 for \$130,000 bonds of Sub-Road District No. 1 of Road District No. 2. Rom P. LeBlanc, Sec., Police Jury of Vermillion Parish, Courthouse, Abbeville, La.

La., Leesville—Road—Vernon Parish voted \$800,000 bond issue; will vote in near future

In writing to parties mentioned in this department it will be of advantage to all concerned if the Manufacturers Record is mentioned.

on \$500,000 bond issue. Address Police Jury.

La., Minden—Sewer—Town will receive bids until August 31 for \$105,000 6% bonds; N. T. Woodward, Town Sec.

La., Monroe—Courthouse, Jail — Ouachita Parish Police Jury sold \$400,000 5% courthouse and jail bonds to Hibernia Securities Co., New Orleans at par and accrued interest with a premium of \$2050. (Lately noted.)

La., New Orleans—Public Belt Railroad—R. M. Murphy, Comsr. of Public Finances will receive bids until Sept. 24 for \$600,000 Public Belt Railroad Bonds.

La., Vidalia—Road—Concordia Parish will receive bids until September 11 for \$100,000 5% road bonds. B. C. Brown, Pres. Police Jury, Concordia Parish, La.

La., Villa Platte—Road—Evangeline Parish sold \$800,000 5% road bonds to Caldwell and Co., Nashville at a premium of \$11.

Miss., McNeil—School—McNeil School District will receive bids for \$5000 school bonds.

Miss., Rolling Fork—Road—Sharkey County will receive bids until August 31 for \$100,000 2nd Supervisors Separate Road District Bonds. Address Treasurer of County.

Miss., Rolling Fork—School—Town will receive bids until August 31 for \$12,000 Rolling Fork Separate Negro School Bonds. W. P. Moore, Chancery Clerk, Rolling Fork, Sharkey County, Miss.

Mo., Cartersville—Indebtedness—City voted \$7598.62 indebtedness bonds; will receive bids until September 20 for bonds. Address Chmn. City Council.

Mo., Mountain Grove—Electric—City will vote on \$35,000 bonds. Address The Mayor.

Mo., Odessa—Water—City will vote Sept. 11 on \$15,000 water bonds. Address The Mayor.

Mo., St. James—Water works and Electric Light—City voted \$45,000 bonds. Address the Mayor. (Lately noted.)

N. C., Canton—School — Champion Bank and Trust Co., of Canton purchased \$25,000, 6% coupon school bonds. (Lately noted.)

N. C., Grifton—Street—Town sold \$21,500 6% street improvement bonds to George and Fetner, Cherryville at par.

N. C., Henderson—Street—City will receive bids until Sept. 10 for \$200,000 6% semi-annual street and sidewalk bonds. Address City Clerk, S. B. Burwell.

N. C., Raleigh—Improvement—City contemplates voting on \$1,250,000 bond issue including \$750,000 to \$1,000,000 for streets, \$175,000 for water, \$100,000 for sewers and \$75,000 for curbs and gutters; Address Mayor Eugene E. Gulbreth.

N. C., Rutherfordton—Sewer and Street—Town will receive bids until September 4 for \$74,000 6% sewer bonds and \$50,000 5½% street paving bonds. Address C. F. Geer, Mayor.

N. C., Shelby—Street—Town will receive bids until August 31 for \$35,000 6% street improvement bonds. D. W. Lackey, Mayor.

N. C., Weldon—Improvement—Board of Comrs. will receive bids until Sept. 5 for \$36,000 improvement bonds. Address E. L. Haywood, Town Clerk.

N. C., Wilson—School—Cross Roads Township voted \$75,000 bonds. Address County Board of Education, Wilson.

Okl., Norman—Road — Cleveland County sold \$200,000 road bonds to Security National Bank of Norman at a premium of \$3000 and accrued interest. (Lately noted.)

S. C., Dillon—School—Board of Trustees, of Public Schools will receive bids until September 7 for the purchase of \$30,000 school bonds. Address J. B. Gibson, Chmn. and W. V. Jones and J. M. Sprunt, Trustees.

S. C., Henderson—Street—City will receive bids until September 10 for \$200,000, 6% street bonds. Address City Clerk, S. D. Burnwell.

S. C., Kershaw—School—Kershaw School District, Kershaw and Lancaster counties, sold \$5000, 6% bonds to J. H. Hilsman & Co., Atlanta.

Tenn., Brownsville—Road—Haywood County voted \$150,000 road bond issue. Address County Comrs. (Lately noted.)

Tenn., Linden—Road—Perry County will receive bids until Sept. 12 for \$25,000 6% highway bonds. J. D. Daniel, Highway Comsr.

Tenn., Milan—Improvement—City sold \$100,000 improvement bonds to Caldwell and Co., Nashville and I. B. Tigrett and Co., of Jackson at 101.50.

Tenn., Baird—Road—Calahan County, Road District No. 1 will vote on Sept. 15 on \$200,000 bond issue to complete section of the Bankhead highway from the Eastland to the Taylor County line. Address County Judge.

Tenn., Caldwell—School—Caldwell County purchased \$8000, 5% school bonds of Caldwell County common school District No. 29.

Tenn., Carrizo Springs—Road — Dimmit County voted \$234,000 bond issue. Address County Comrs.

Tenn., Coleman—Road — Coleman County, Precinct No. 4 will vote September 2 on bond issue of \$200,000 to build highway Coleman and the Taylor County Line; S. J. Pieratt, County Judge, Coleman, Tex.

Tenn., Fort Worth—Courthouse—Schleicher County sold \$60,000 bonds to Gray Investment Co., Fort Worth.

Tenn., Georgetown — Road — Williamson County will receive bids until Sept. 11 for \$30,000 road District No. 95 bonds. F. D. Love, County Judge and H. A. Hodges, County Auditor, Georgetown, Tex.

Tenn., Grand Prairie—Sewer—Town sold \$65,000 sewer installation bonds.

Tenn., Jayton—School—Jayton Independent School District, Kent County, defeated \$28,000 school bonds.

Tenn., Laredo—Street Paving—City sold \$200,000 bond issue to Caldwell, Mosser and William, Chicago at par and accrued interest. (Lately noted.)

Tenn., Llano—School—Field Creek School District voted \$15,000 school bonds.

Tenn., Madisonville—Road—Madison County will vote September 15 on \$150,000 bond issue to build State Highway No. 21; T. Ferguson, County Judge, Comms. Court.

Tenn., Monroe—Montgomery County, W. H. Lee, Judge, will receive bids until Sept. 12 for \$120,000 5½% special bonds.

Tenn., Pearsall—Road — Frio County will vote on \$65,000 bond issue, Sept. 18 for building of hard surfaced road between the Meridian highway at Delley, and extending to the County line to connect with the proposed Carrizo Springs—Eagle Pass Highway. Address J. C. Pranglin, County Judge.

Tenn., Smithville—School—Edwin Hobby of Austin purchased \$90,000 bonds of the Smithville independent school district.

Tenn., Sulphur Springs—Road—District No. 8 voted \$550,000 bond issue. Address Chairman.

Tenn., Texarkana—Municipal Bldg.—City voted \$200,000 bonds. Address the Mayor.

Va., Danville—Water—City sold \$100,000 water bonds to Robert Garrett and Sons of Baltimore at a premium of \$610 and accrued interest.

Financial Notes

Auto Security Co., Louisville, Ky. increased capital from \$10,000 to \$25,000.

Motor Finance Co., Shreveport, La., increased capital from \$50,000 to \$250,000.

New York Plate Glass Insurance Co., Nashville, Tenn., increased capital from \$200,000 to \$500,000.

Pearl City Building & Loan Assn., Hopkinsville, Ky., increased capital from \$100,000 to \$200,000.

Security Abstract & Insurance Co., West Palm Beach, Fla., contemplates increasing capital Frank G. Lewis, Sec.

Vinita Building & Loan Association, Vinita, Okla. increased capital from \$2,000,000 to \$5,000,000.

Trade Literature

Catalogue of Bronze Tablets, Letters, Etc.

One of the best catalogs ever issued concerning bronze tablets and letters has just been issued by the Newman Manufacturing Company, of Cincinnati. It has forty-eight pages 9 by 12 inches in size with more than 100 photographic reproductions of tablets, memorials and special characters. In addition to the usual "per square foot" price lists original with the Newman organization, the book also gives the extra charges for fancy borders and special styles of lettering. Everyone interested in bronze tablets, etc., will appreciate this valuable book and the company will send a copy of it free to anyone upon receipt of a request.

A Fine Golden Anniversary Catalogue

The Industrial Works, of Bay City, Mich., is now distributing its "Golden Anniversary Catalog," commemorating fifty years of service to American industry. The book contains complete illustrations, engineering data and performance records of products of the plant such as rail, traction and crawling tractor locomotive cranes, wrecking cranes, wharf, barge and gantry cranes, transfer and pillar cranes, railroad pile drivers, combination crane-pile drivers, portable rail saws, transfer tables and steam pile hammers and buckets. An outline of crane history from ancient times to the present is a feature of the preliminary pages and following are pictures and a description of a trip through the Industrial Works. The rest of the book is in sections. Section 1 relates to all types and sizes of cranes, steam, gasoline or electric.

Section 2 to buckets, grapples, magnets, generators, draglines, etc. Section 3 explains and illustrates the entire line of industrial wreckers, steam or electric. Section 4 covers special railroad equipment, such as cranes of different types, rail saws, etc. Section 5 illustrates and describes pile drivers, locomotive cranes, steam pile hammers, etc., and Section 6—the last—deals with special foreign features. Thus, the entire book possesses much educational value. Cranes are made in capacities of from 5 to 60 tons and wreckers from 75 to 200 tons. The catalog is finely printed and bound and the pictures are unusually fine and interesting, as well as instructive.

In writing to parties mentioned in this department it will be of advantage to all concerned if the Manufacturers Record is mentioned.

INDUSTRIAL NEWS OF INTEREST

Items of news about industrial, railroad or financial interests, building operations, construction work, municipal improvements, or the sale of machinery or the letting of contracts in the South or Southwest, are invited from our readers whether they are advertisers, or subscribers or not. We invite information of this character from readers in the North and West about their Southern business operations, as well as from Southern readers. News of value will be published just as readily when from non-advertisers as from advertisers.

Assistant Managers Appointed

W. M. Sterns and R. N. Birge have been appointed assistant managers of the supply department of the General Electric Co., Schenectady, N. Y., by D. R. Bullen, manager, of that department. Mr. Stearns is a graduate of the Massachusetts Institute of Technology, class of 1896. He has been with the company since 1909, latterly having supervision of Marsh patents. Mr. Birge has been with the company since 1900 and is manager of the street lighting section of the supply department.

Sale of Real Estate and Machinery

A liquidation sale of valuable surplus real estate, machinery and equipment of the Badenhausen Boiler Co., is to take place on Monday and Tuesday, September 17 and 18 on the premises at Cornwells, Pa. The property includes a modern machine shop and land 400 by 830 feet in size, a railroad siding, a manufacturing site on the state road 475 by 1466 feet and another manufacturing site adjoining the road, 400 by 1455 feet, including sand and gravel pits, besides a tract of 21½ acres extending from the road to the Delaware River. A description of the machinery and equipment to be sold in lots is given in the formal announcement of the sale that appears elsewhere in this issue. Catalogues may be obtained from the auctioneers, Samuel T. Freeman & Co., 1519-21 Chestnut St., Philadelphia, Pa.

Appointment of Sales Representatives

The Pawling & Harnischfeger Co., Milwaukee, Wis., manufacturers of excavators, cranes and machine tools, have recently appointed the Laughlin Barney Machinery Co., of Pittsburgh, Pa., to represent them in the western part of Pennsylvania and the eastern part of Ohio as sales agents for their complete line of P. & H. horizontal boring, drilling and milling machines.

Sales of Ice and Refrigerating Machinery

The York Manufacturing Co., manufacturers of ice-making and refrigerating machinery, York, Pa., report making a total of 208 sales and installations of their products since July 25, comprising 46 in towns and cities of the South including Centerville, Md.; Bristol, Va.; Pikeville, Ky.; Robersonville, N. C.; St. Louis, Mo.; Dallas, Tex.; Houston, Tex.; Worton, Md.; Washington, D. C.; Silver Grove, Ky.; Seguin, Tex.; Hallettsville, Tex.; Lubbock, Tex.; Hendersonville, Tenn.; Port Arthur, Tex.; Shreveport, La.; Mountain Grove, Mo.; La Coste, Tex.; Gonzales, Tex.; Richmond, Va.; Muskogee, Okla.; New Orleans, La.; Tampa, Fla.; Latonia, Ky.; Cumberland, Md.; Corsicana, Tex.; Bradentown, Fla.; Baltimore, Md.; Sparrows Point, Md.; Falling Rock, W. Va.; Okeechobee, Fla.; New Martinsville, W. Va.; Louisville, Ky.; Charleston, W. Va.; Florence, Ala.; and Tulsa, Okla. In several of these Southern places two or more sales or installations were made.

Electric Railway Equipment for Brazil

Orders for about \$1,000,000 of new equipment for electrifying 35 more miles of the Paulista Railway in Brazil, have just been placed with the International General Electric Co. The railway's first contract with the company in 1920 provided for 28 miles of double track electrification and this new work will make 63 miles electrified from Jundiahy to Tatu. More extensions are expected. The new order includes 5 switching locomotives of 62 tons, complete sub-station and equipment therefor, overhead line, materials, etc. The first contract called for 8 freight locomotives and four passenger locomotives, a sub-station, overhead line, and other equipment. On the first 28 miles from Jundiahy to Campinas operation was established in October 1921 and it is stated that this line has made substantial savings in consequence. Power is supplied by the Sao Paulo Light & Power Co.

New Explosive Which Does Not Freeze

Ammite is a new product of the Atlas Powder Company, Wilmington, Del., which is claimed to have all of the advantages of dynamite and it is, furthermore, a non-freezing explosive. In this new explosive the manufacturers say that they have produced the ideal article of its kind, one which will not freeze and yet it possesses the advantages of dynamite in strength, velocity, resistance to water, sensitiveness and stability. Besides, it does not cause headaches when it is used and it is an all the year round explosive for it is not affected by either heat or cold. It is graded as to strength like dynamite and is made in six grades, viz. 75 per cent, 60, 50, 40, 35 and 30 per cent, so that it may be obtained to meet requirements for any kind of blasting.



THE MATTHEW ADDY COMPANY

Principal Office, CINCINNATI, OHIO

Branch Offices—PHILADELPHIA, ST. LOUIS, CHICAGO, PITTSBURGH, INDIANAPOLIS

**Wholesale Dealers in PIG IRON—
STEEL—FLUOR SPAR—ALLOYS—
METALLURGICAL COKE—COAL—ETC.**

Pioneers in the distribution of SOUTHERN PIG IRON to the markets of the United States.

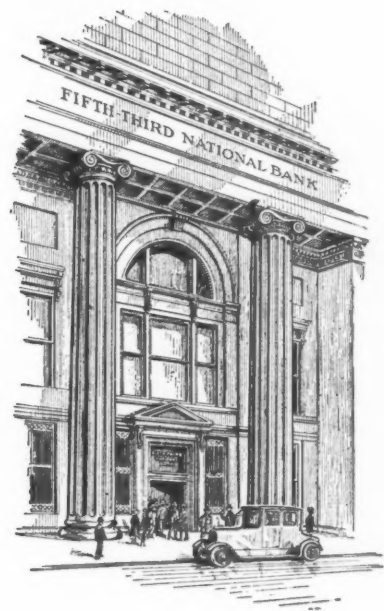
Matthew Addy had the distinction of bringing North and selling for Foundry use the first Pig Iron produced in Alabama.



CINCINNATI

is inseparably linked with the business affairs of the Middle and Southern States.

Progressive banking works hand in hand with progressive business. Together they are achieving great things in this vast territory.



These affiliated institutions—CINCINNATI'S LARGEST BANKING UNIT—are proud of their share in this great business.

*Combined Capital and Surplus over
Seventy-Nine Million Dollars*



THE FIFTH-THIRD
NATIONAL BANK OF CINCINNATI
AND
THE UNION TRUST CO.



Whether doing duty under a masterpiece of the road-builders' art or taking the bumps and hard usage of a country lane NEWPORT CULVERTS give the same dependable service at all time.

A Campbell County, Kentucky installation on a third grade road where culvert receives hardest usage possible.

NEWPORT CULVERT CO., INC.
254 West 10th Street
NEWPORT, KY.

Our records show that our average delivery time on carload shipments into our territory is three days and eighteen hours. We believe this cannot be bettered by shipments moving from any other point.

With large stocks of various diameters of pipe carried at Memphis, Tennessee, Macon, Georgia, Chattanooga, Tennessee and Raleigh, North Carolina we are in admirable position to take care of either carload or less than carload orders from any point in the South.

NEWPORT Culverts of "Genuine Open Hearth Iron" are giving service where other types of drainage structures have failed.

A request will bring our new catalogue, which will no doubt prove of interest to you.



NEWPORT CULVERT CO.
NEWPORT, KENTUCKY

Backed by 75 Years' Experience

POWELL VALVES

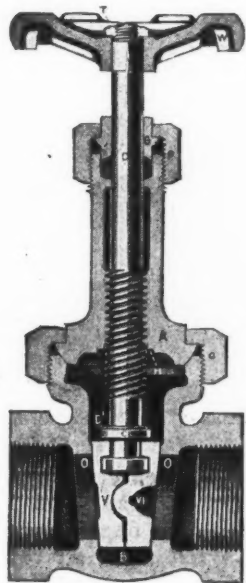
**FOR SERVICE AND
DURABILITY**

**BRONZE
White Star
Gate Valve**

Steam working pressure up to 200 pounds extra heavy for 300 pounds.

Wedge discs of non-corrosive **Powellium Nickel**. Rising or non-rising stem. Guaranteed to give service and satisfaction.

Sizes $\frac{1}{4}$ —3 inches.



WHITE STAR GATE VALVE

Fig. 375

*Order from
your dealer*

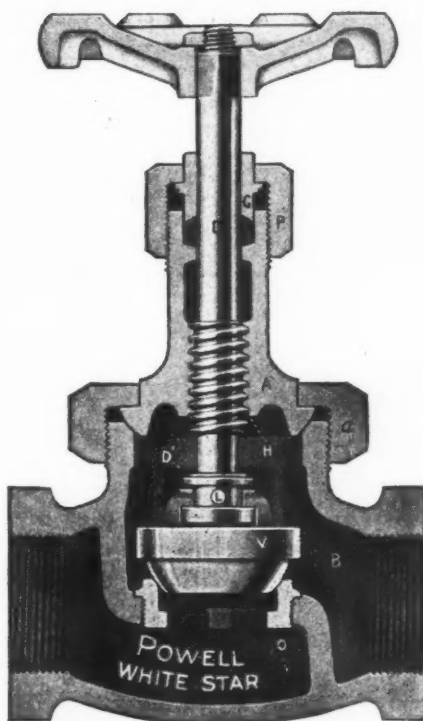


Fig. 102

BRONZE

White Star Globe Valve

Steam Working Pressure up to 200 pounds. Extra heavy for pressure up to 300 pounds.

Sizes $\frac{1}{4}$ —3 inches.

**The New 150-pound
BRONZE
Gate Valve**

Designed for service where conditions demand a High Grade, Compact, inside screw stem gate valve. Reinforcing ribs cast in the body shell insure relief from undue strains. Non-rising stems.

Sizes $\frac{1}{4}$ —3 inches.



Fig. 512

*Write us for
information*

The Wm. Powell Co.
Cincinnati, Ohio

SHEET METAL BUILDING MATERIALS OF EVERY DESCRIPTION

Painted and Galvanized Steel AND Iron Roofing—Siding—Ceiling

Eave Trough and Conductor Pipe
Metal Shingles—Ridge Roll, Etc.



Send us your inquiries

THE GLOBE IRON ROOFING & CORRUGATING CO.
CINCINNATI, OHIO



Steel Stacks

Boiler Breechings

**Welded or Riveted
Tanks**

Steel Hoppers

**Tar and Asphalt
Kettles**

Sand Dryers

*Fabricators and
Erectors of
Steel Plate Work*

Send us your Specifications or Blueprints.

THE JOS. HONHORST CO.
1020 W. Sixth St., CINCINNATI, OHIO

LITTLEFORD "TAR AND ASPHALT HEATERS"



Style No. 48

Littleford Tar and Asphalt Heaters are selected by discriminating buyers because of the noticeable "built in" quality and the dependable service which they give. Each different type has been developed by our engineers to meet special demands in road and street construction and maintenance work. Made in various sizes to suit individual requirements.

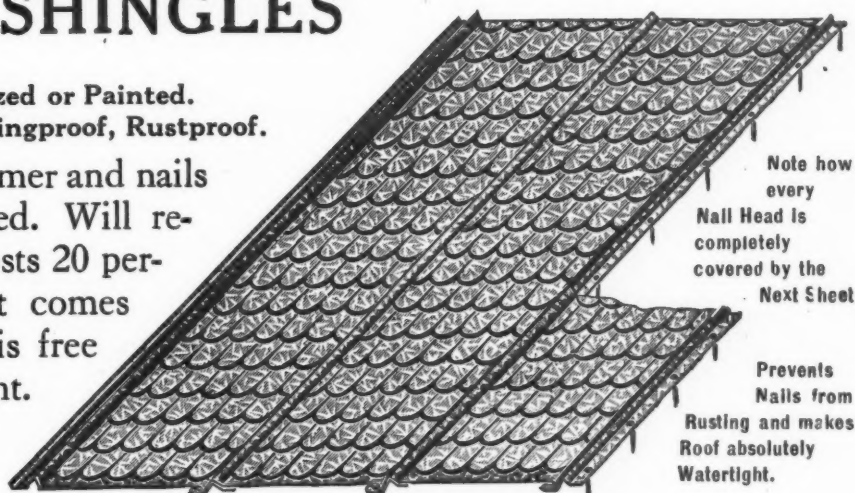
Send For Complete Catalogue

LITTLEFORD BROS.
442 E. Pearl St. Cincinnati, O.

EDWARDS INTERLOCKING "REO" CLUSTER SHINGLES

"Tightcote" Galvanized or Painted.
Durable, Fireproof, Lightningproof, Rustproof.

Easily applied—a hammer and nails the only tools you need. Will reduce your insurance costs 20 per cent. The water that comes from a "Reo" Roof is free from color and sediment.



Edwards "PERFECTION" Roofing

Painted or "Tightcote" Galvanized.

No Wood Sticks Needed—Not a Single Nail Head Exposed.

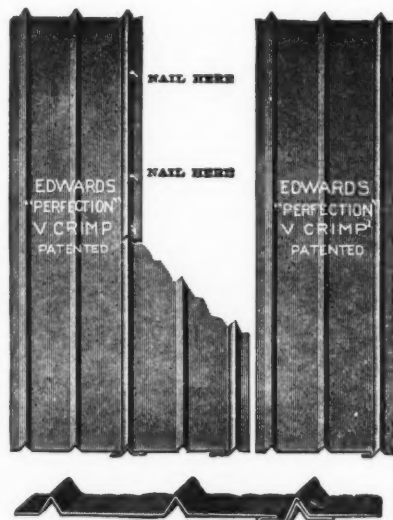


Fig. 376 (Patented April 7, 1908.)
Edwards "Perfection" with
Center Crimp.

Edwards V-Crimp Roofing
Edwards "PEERLESS" Five
Crimp Roofing

Edwards Corrugated Sheets

Patent Rock-Face Stone Siding

Patent Rock-Face Brick Siding

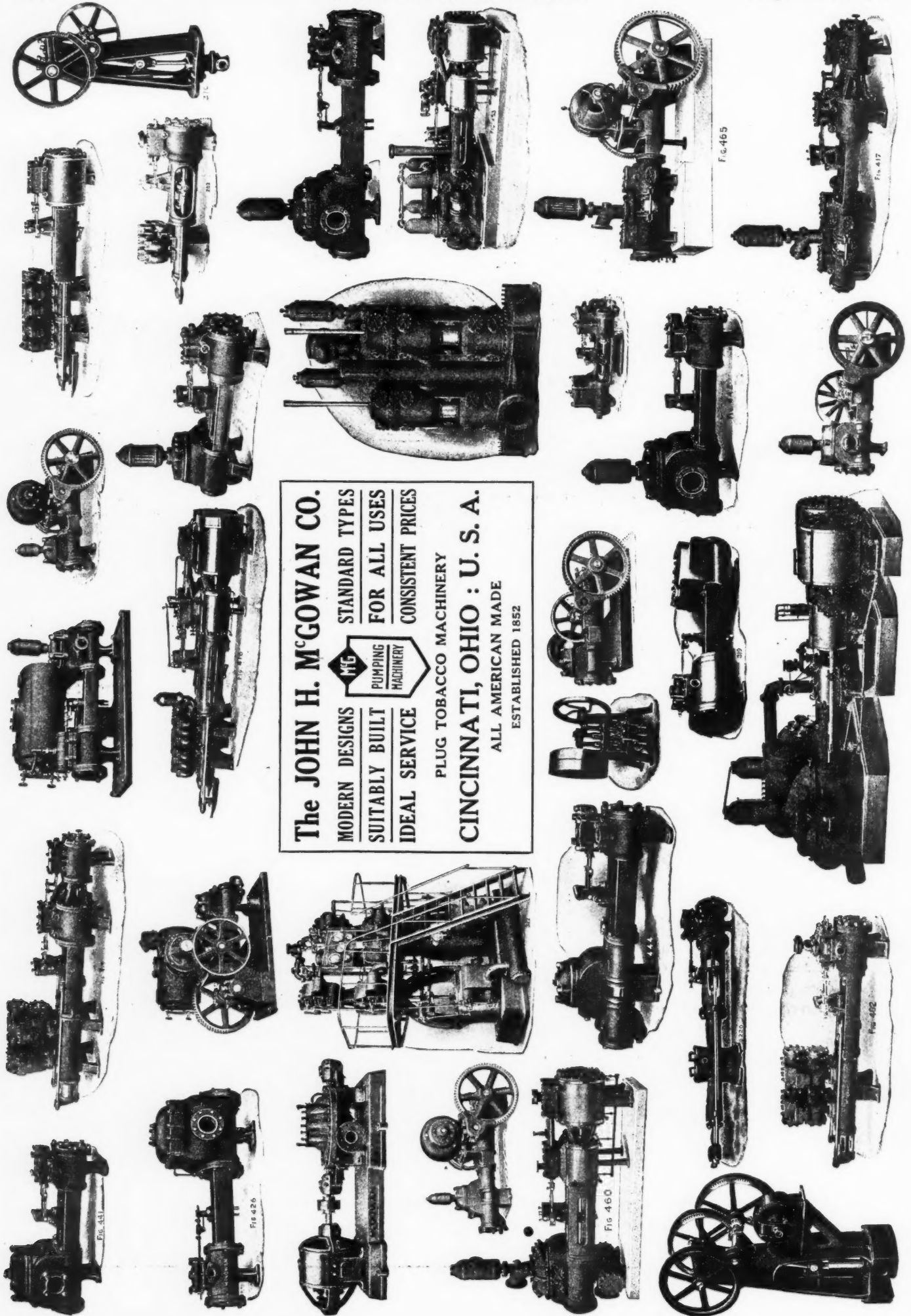
Pressed Steel Brick Siding

Send for our literature—it explains


THE EDWARDS MANUFACTURING CO.

411-431 Culvert St., Cincinnati, Ohio

The World's Largest Manufacturers of Metal Roofing, Metal Shingles, Metal Spanish Tile, Metal Ceilings, Metal Garages, Portable Buildings, Rolling Steel Doors, Partitions, etc.



The JOHN H. MCGOWAN CO.

| | | |
|----------------|---|-------------------|
| MODERN DESIGNS |  | STANDARD TYPES |
| SUITABLY BUILT | | FOR ALL USES |
| IDEAL SERVICE | | CONSISTENT PRICES |

PLUG TOBACCO MACHINERY

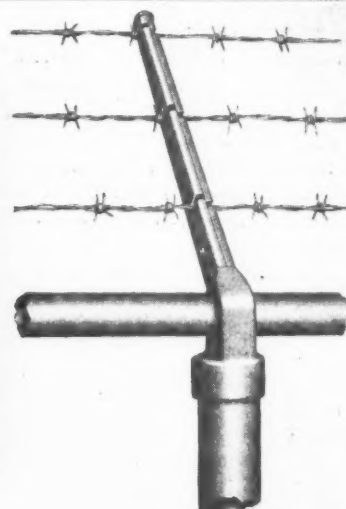
CINCINNATI, OHIO : U. S. A.

ALL AMERICAN MADE
ESTABLISHED 1852

THE STEWART IRON WORKS CO. No. 535 STEWART BLOCK CINCINNATI, O.

"The World's Greatest Iron Fence Builders"

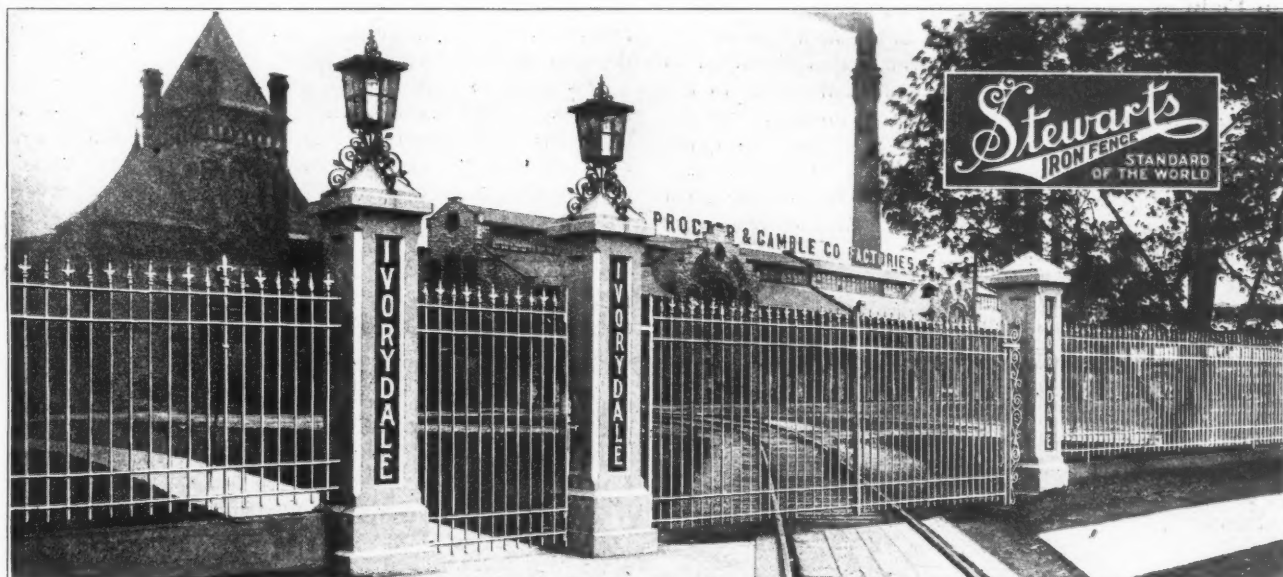
We Also Manufacture BALCONIES, GRILLES, FOLDING GATES, MISCELLANEOUS WIRE WORK



DETAIL OF ARM FOR HARD WIRE OVERHANG

IRON OR CHAIN LINK WIRE FENCE FOR INDUSTRIAL INSTITUTIONS AND ALL OTHER PURPOSES.

WRITE FOR CATALOG OR LET US SEND OUR REPRESENTATIVE TO SEE YOU



THE STEWART IRON WORKS CO. No. 535 STEWART BLOCK CINCINNATI, O.

"The World's Greatest Iron Fence Builders"

"Turner County Plan" of Diversification Wins New Converts.

Jeffersonville, Ga., August 22—[Special.]—A big delegation of Twiggs county farmers have just returned from a trip to Turner county, Ga., where they saw the famous "Turner County Plan" in operation, and made careful note of diversified farming and its results in that section.

The delegation left Tuesday morning, August 21, going to Ashburn by way of Cochran, Hawkinsville, Vienna, Cordele and Arabi, and visiting some of the leading farms of Turner county.

The first stop was made at the farm of Dr. W. L. Storey, which is being operated on halves by Mr. Henderson, the present tenant. Here the landlord furnishes the land and the initial stock, and the tenant furnishes the labor, the products being equally divided.

Dr. Storey's farm offered a typical example of what could be done with the cow, the hog and the hen as co-workers with the farmer, and proved a good eye-opener to members of the delegation.

At the Turner county convict farm, the Twiggs delegation found fine crops of corn and potatoes, and every farm convenience in operation. Here several members of the party saw an air pressure water tank in operation for the first time, and resolved to install one "back home" at the first opportunity.

The next stop was made at the farm of G. W. Brown, president of the Turner County Farm Bureau. The tourists were impressed with the fine crops of corn, hay and cotton growing on the farm, but particularly with the thriving pecan grove which, seeded to Lespedeza, made an excellent pasture.

The Holly poultry farm, and the Aldridge White Leghorn farm gave the visitors an insight into the possibilities of poultry farming in the section, and the party returned to Jeffersonville determined to adopt diversified farming for the future.

Alabama Power Company Offers Use of Building and Equipment for Manufacture of Calcium Arsenate in Fight on Boll Weevil.

Birmingham, Ala.—In order to aid in the fight against boll weevil, the Alabama Power Co. of this city has offered to donate the use of certain properties in Montgomery to the Gulf States Chemical & Refining Co., of Birmingham, for the manufacture of calcium arsenate. Beside a large brick building and electrical equipment, the offer also includes the services of one of the company's chemists who has devoted much time and study to experiments with the electrolytic process of manufacturing the arsenate.

The plan of the Gulf States Chemical & Refining Co. is to begin operation in time to have a supply of the product on hand when the boll weevil makes its appearance in the 1924 cotton crop, and it is understood that the entire output will be offered exclusively to Alabama farmers at prices low enough to make it available for every cotton producer in the State. In addition to calcium arsenate, the company will also manufacture such other insecticides and fungicides as will be valuable to farmers in the production of fruits and vegetables.

To Erect Salt Plant of 500 Tons Daily Capacity.

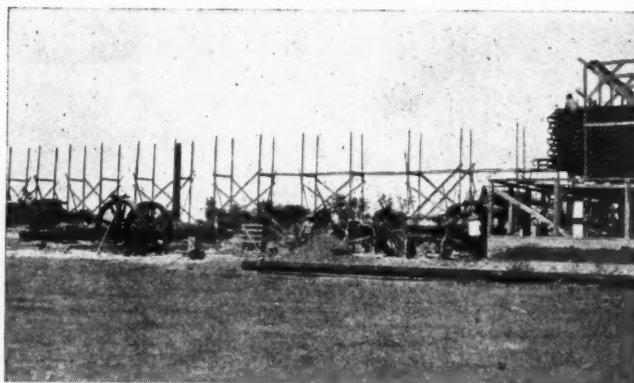
Edith, Okla.—The Santa Fe Salt Company, backed by eastern capitalists and capitalized at \$2,000,000, has acquired title to 2000 acres of salt deposits in Woods County, about two miles from Edith, and plans to install a plant of 500 tons daily capacity. A new system of sprays and evaporation will be used. It is stated that the plant will be completed in six months.

BUILDING \$265,000 GASOLINE PLANT.

Proven Oil Field Now Producing 2500 Barrels Weekly.

Brownwood, Tex., August 25—[Special.]—The proven oil field of north Brown county is three miles long and one mile wide and the weekly production about 2500 barrels. No well has yet come in with a larger production than 150 barrels every twenty-four hours. Of the large number of wells that have been just put down twenty-four have proven to be fine gassers, some producing as much as two million cubic feet every twenty-four hours. Others have proven dry.

Several oil companies became practically bankrupt because of the gas holes, and were in a very despondent state until three months ago the Dixie Gasoline Co. entered into a con-



COOLING COIL, AND PART OF CASINGHEAD MACHINERY

tract with owners of the abandoned gas wells to convert the gas into marketable gasoline. Work was commenced and a building site on ten acres of specially cleared land was selected. Machinery for the plant is now on the ground and it was announced a few days ago by superintendent R. L. Ponsler, that the plant would be ready to begin operations September 15. It will cost about \$265,000 and will have a capacity for converting 6,500,000 cubic feet of gas into gasoline—about 8000 gallons daily. There are now one hundred and ten men employed placing machinery, laying lines to gas wells, making proper connections and getting everything in shape for the opening day.

The company has built a dozen or more residences for permanent employees, and these residences are lighted with electricity made on the ground, have water and sanitary connection, and other conveniences. The water system of the plant consists of a central tank considerably elevated, with a capacity of 1600 barrels, and which gives pressure sufficient for sanitary and domestic use in every residence on the ground. The casinghead plant, or gasoline manufacturing plant, has solved the problem of waste gas in this section of the oil field and now a gas well is accounted as good or better than an oil well.

Louisville's Fall Trade Directory.

The Louisville Trade Directory and Merchants Buyers Guide for the Fall of 1923 has been issued by the Merchants & Manufacturers Association of Louisville, Kentucky, and is a very finely prepared and attractive publication of sixty-four pages. As a distributing point Louisville is conspicuous, having, it is stated, splendid facilities for shipping, while it is the home of a thousand industries and commercial houses of large dimensions and wide repute. Special inducement is offered to merchants to make their semi-annual purchases in the city and the announcements of many firms and individuals appear upon the pages of the Directory, many being impressively illustrated. Robert M. Kerr is secretary of the Merchants & Manufacturers Association.



*These Pamphlets
will prove valuable to those
interested in*

Tax-Exempt Bonds

THEY explain how we judge the investment qualities of Municipal and Joint Stock Land Bank Bonds when buying them with our own funds.

A reading of these pamphlets, written by our Buying Department—from the “buying” standpoint—will enable individual investors to more accurately judge for themselves, individual offerings of these two important types of tax-exempt bonds.

We shall be glad to send either or both of these pamphlets upon request.

WRITE FOR

“How to Judge Municipal Bonds”—Booklet 338-A M

“Facts Worth Knowing About

Joint Stock Land Bank Bonds”—Booklet 338-A J

HALSEY, STUART & CO.
INCORPORATED

| | | | |
|--------------------------------|--------------------------------|----------------------------------|-----------------------------------|
| CHICAGO 209 S. La Salle St. | NEW YORK 14 Wall St. | PHILADELPHIA 100 S. Broad St. | BOSTON 82 Devonshire St. |
| DETROIT 601 Griswold St. | ST. LOUIS 319 N. Fourth St. | MILWAUKEE 425 E. Water St. | MINNEAPOLIS 610 Second Av., S. |

The Magnitude of the South's Business

The growth of the South is attracting the attention of the business world as never before.

Is your business expanding? Do you need increased banking facilities?

We invite correspondence.

BALTIMORE COMMERCIAL BANK

GWYNN CROWTHER, President

Pratt Street and Market Place, Baltimore, Md.

Capital and Surplus \$900,000.00

Member Federal Reserve System

MARYLAND TRUST COMPANY

BALTIMORE

Transacts a General Trust and Banking Business

Correspondence and interviews invited

CAPITAL, \$1,000,000

“HOUSTON'S BANK OF SERVICE”

Capital & Surplus \$2,000,000.00 Resources over \$21,000,000.00

Let us serve you in Houston.

Information cheerfully furnished.

SOUTH TEXAS COMMERCIAL NATIONAL BANK
P. O. Box 1725 HOUSTON, TEXAS

IN RICHMOND VIRGINIA

The First National Bank
offers complete facilities
for quick collections in this
territory.

FIRST NATIONAL BANK

JOHN M. MILLER, JR.,
President

Resources over \$30,000,000
Capital and Surplus \$4,000,000

Attention
Contractors and Municipalities

We Buy
MUNICIPAL BONDS

THE LEWIS S. ROSENSTIEL CO.

Union Trust Building

Cincinnati

We Buy Bonds

City, County, School and Road, from
Municipalities and Contractors

WRITE

THE PROVIDENT SAVINGS BANK & TRUST CO.
CINCINNATI OHIO

WE BUY MUNICIPAL BONDS

We are interested in the purchase of
Southern Municipals including road,
school, county, drainage and levee bonds.

M. W. ELKINS & CO.

Southern Trust Bldg.

Little Rock, Ark.

When Buying Securities you Investigate
Their Worth as a Safe Investment.

Why Not Have a Reliable Bank Note
Company Engrave them as an addi-
tional safeguard.

SECURITY BANK NOTE CO.
PHILADELPHIA NEW YORK
223-5-7 CHESTNUT ST. 20 BROAD ST.

The Oscar T. Smith Company

Manufacturing Bank Stationers
407-9-11 E. SARATOGA STREET
BALTIMORE, MD.

OSCAR T. SMITH
President

Pacific Coast Collections BANK AND COMMERCIAL

M. Z. FARWELL, Inc.

Flatiron Building : : San Francisco

Legal connections in all principal coast cities

References: Any bank in San Francisco
Any bank in Northern California

JOHN NUVEEN & CO.

First National Bank Building

CHICAGO

We purchase SCHOOL, COUNTY and MUNICIPAL
BONDS. Southern Municipal Bonds a Specialty.

Write us if you have bonds for sale



A SECURITY OF CHARACTER

There are securities and securities—but here
is one 22 years old—absolutely safe—capital
always available without loss. \$100.00 and
up. References—any Bank and Trust
Company in Savannah, Ga. Send for
Booklet.

G. A. MERCER COMPANY
Investment Bankers Savannah, Ga.

HAVE YOU BONDS FOR SALE?

WE BUY ALL CLASSES OF MUNICIPAL BONDS,
INCLUDING CITY, COUNTY, SCHOOL,
PAVING, ROAD AND DRAINAGE

The Hanchett Bond Co. Inc.
39 SOUTH LA SALLE ST., CHICAGO

Contractors and Manufacturers TIME CHECKS



We Make Them Promptly. Headquarters for Seals,
Stock Certificates, Stencils, Steel Dies, Brass Signs,
Enamel Plates, Memorial Plates, Church Seals and Pew
Plates. Made on our Premises. Send for Catalogue.

THE J. F. W. DORMAN COMPANY
BALTIMORE, MD.

We Buy Bonds

and invite inquiries from municipalities and contractors
We deal in city, county, district, school, road, lighting,
water works and other municipal issues.

A. C. ALLYN & CO.

71 W. Monroe St., Chicago Ill.

NEW YORK MILWAUKEE MINNEAPOLIS BOSTON

NOTICE TO CONTRACTORS

We want to buy bonds issued by cities, towns
counties, school, road or drainage districts that you
may be able to take in exchange for work. Address
us at our nearest office.

W. L. SLAYTON & CO.

New Orleans, La. Toledo, Ohio Tampa, Fla.
Chicago, Ill. Glasgow, Mont.

BLACK & COMPANY

(WILMER BLACK, C. P. A.)

CERTIFIED PUBLIC ACCOUNTANTS

OFFICES:

Suite 1208 GARRETT BUILDING - BALTIMORE, MD.
6 HAMILTON ROW - HAGERSTOWN, MD.

F. WM. KRAFT

LAWYER

Specialist in Examination of

Municipal and Corporation Bonds
and Preparation of Proceedings relating thereto

517-520 Harris Trust Bldg. CHICAGO, ILL.
111 West Monroe St.

TODD & McCOLLOUGH

Members of

AMERICAN SOCIETY OF CERTIFIED PUBLIC ACCOUNTANTS

Auditing, Cost and Accounting Systems,
and Federal Tax Service.

No. 323 South Tryon St.

Charlotte, N. C.

Do You Need More Capital?

If so, tell the readers of the
MANUFACTURERS RECORD
through an advertisement in the
Classified Opportunities Department

WANTED—TO GET IN TOUCH with party with
money to finance meritorious cattle and sheep raising
proposition in Southeast Mississippi. Excellent op-
portunity for those with capital. Will stand closest
investigation. No. 5467, care Manufacturers Record,
Baltimore, Md.

O. R. W., New Orleans, La. "Our Company, besides
myself, have done some advertising in your periodical
with good result, and we hope when the occasion arises
to do some more. We consider your magazine through
its Classified Opportunities columns an excellent medi-
um to get in touch with buyers and sellers throughout
the country, and for your past services we wish to
thank you."

The Railroads Helping to Let the West Know the Georgia Yam.

Atlanta, Ga., August 24—[Special.]—Reduced rates on sweet potato shipments from Georgia to points north of the Ohio river have just been announced by the Georgia Public Service Commission, following receipt of a new scale of rates from the railroads of this section.

The reductions, which average from 4 to 8 cents per 100 pounds from Georgia points to Chicago, were obtained by the Public Service Commission as a result of the activities of E. M. Price, the commission's rate expert.

Acting upon a request from the Georgia State Bureau of Markets, Mr. Price made a careful investigation of sweet potato rates, with the results noted.

The following table shows the present rates and the new rates from several prominent sweet potato shipping centers in Georgia to Chicago:

| Shipping Point | Present Rate Cents | New Rate Cents |
|----------------------|-----------------------|-------------------|
| Omaha, Ga. | 77½ | 69½ |
| Blackshear, Ga. | 75 | 73½ |
| Cairo, Ga. | 75 | 73½ |
| Moultrie, Ga. | 75 | 73½ |
| Montezuma, Ga. | 71½ | 69½ |
| Wadley, Ga. | 77½ | 73½ |

Similar reductions were obtained from other shipping points in Georgia to Chicago, as well as to other points north and east.

These reduced rates will come as a big help to Georgia sweet potato growers, who are bending every effort to put the Georgia Yam on the map and make it one of the profitable crops of the section.

With improved methods of curing and storing being adopted all over the state, with farmers organizing to put their product on the Northern and Eastern markets in attractive shape, and with the present reduction in sweet potato rates, the prospects of making sweet potatoes a profitable Georgia crop are brighter now than they have ever been in the past.

Century Trust Company of Baltimore to Be Capitalized at \$500,000.

Directors of the National Bank of Baltimore who planned several weeks ago to organize the Emerson Trust Co. with a capital stock of \$1,000,000, have decided to call the new institution the Century Trust Co. and place its capital stock at \$500,000, divided into 10,000 shares of \$50 par value each. The new company will occupy the lower floor of the building at Baltimore and St. Paul streets, construction of which is being completed for the National Bank of Baltimore.

Among directors of the Century Trust Co. who have already been named are: Allan L. Carter, Frank J. Caughy, Adam Deupert, William J. Donnelly, Herman H. Duker, John B. H. Dunn, Isaac E. Emerson, Harry G. Evans, Frederick H. Gottlieb, John W. Hall, John Hinkle, Snowden Hoff, J. Monroe Holland, J. William Middendorf, John C. Muth, John Schoenewolf, James L. Sellman, John C. Taliaferro, T. Rowland Thomas, Peter E. Tome, Robert E. Tubman, John L. Whitehurst and Howard E. Young.

Laurinburg Will Make Water and Sewer Improvements.

Laurinburg, S. C.—Laurinburg will expend \$150,000 for water and sewer improvements in accordance with recent action of the city council which has authorized a bond issue of that amount for the purpose. A survey was made last year by W. E. Matthews, engineer, and an estimate of the cost was based on this survey, together with the estimate of cost of building a new reservoir and pumping station.

The Gilbert C. White Co. of Durham, N. C. has been retained as consulting engineer.

Buys Coal Land in Dolls Run Section—Extensive Developments May Follow.

Morgantown, W. Va., August 25—[Special.]—Acquisition of 110 acres of coal in the Pittsburgh seam by W. K. Hatfield of this city, at a cost of \$50,000 or approximately \$455 an acre will probably be the forerunner of extensive development of the coal resources of the Dolls Run section of Monongalia county where the coal land is located. The coal was purchased from the Lewis Cunningham estate. Mr. Hatfield owns other tracts adjoining the one purchased and it is indicated that the various tracts will be consolidated and sold to an independent coal company which will undertake the development of some of the tracts in the Dolls Run section.

Railroad Will Build \$150,000 Warehouse.

Richmond, Va., August 20—[Special.]—Contract has been awarded by the Richmond, Fredericksburg & Potomac Railroad, W. D. Duke, general manager, with offices in this city, for the erection of a \$150,000 warehouse here to be occupied by the Great Atlantic & Pacific Tea Co. The Wise Granite & Construction Co. is the general contractor and Carneal & Johnston are the architects, both of Richmond.

Of reinforced concrete and brick construction, the building will be three stories and basement, with irregular dimensions, 115 by 190 by 56.6 by 181 feet. The roof will be of slag and the floors will be laid on concrete slabs. It will be equipped with metal doors and steel sash and trim.

Wheeling Steel Company Incorporates With Capital Stock of \$100,000,000—To Take Over West Virginia Properties.

Minneapolis, Minn.—Articles of incorporation have been filed here by the Wheeling Steel Co., controlled by Minnesota and Delaware capitalists and having an authorized capital stock of \$100,000,000, for the purpose of operating mines, producing gas and electric power and operating a laboratory. It is stated that the company has taken over the Wheeling Steel & Iron Co., Wheeling, W. Va., Labelle Iron Works, Steubenville, Ohio; Whittaker-Glessner Co., Wheeling, and the Pitt Iron Co. in West Virginia.

\$250,000 Radiator Foundry for Norfolk.

A radiator foundry, employing at the beginning about 250 persons, will be constructed by the Miller Engineering Corporation of Norfolk on a site near the municipal terminal project at a cost of approximately \$250,000, according to a recent announcement.

The Norfolk City Council has approved a recommendation of the City Manager that the site, fronting 400 feet on the Belt Line, be sold to the company under the usual terms at \$1500 per acre. The property contains about five acres.

The Miller Engineering Corporation advises the MANUFACTURERS RECORD that within the next week or two further information will be available.

Western Electric Company May Build Creosoting Plant at Nashville.

Nashville, Tenn.—The Western Electric Co. of New York has secured an option on a site near Shelby Park here for the establishment of a creosoting plant. It is stated that the option was bought from George R. Gillespie & Co. of Nashville, representing J. T. Meredith of California, owner of the property, and that an additional 15-acre tract of the Meredith property is being sought.

It is understood that the proposed plant will employ about 200 workmen and will be used as a treating plant and Southern distribution point for telephone poles.

Promoting Cooperation and Fair Competition

A B P Standard No. 8
"To COOPERATE with all organizations and individuals engaged in creative advertising work."

THE distance between buyer and seller must be shortened; the road-way which leads from producer to the final consumer must be made straight, broad and smooth; the cost of distribution must be reduced—that is why we pledge ourselves to cooperate with all others engaged in creative advertising work.

We believe that advertising is an economic force, a piece of improved sales machinery, which properly employed, becomes a boon to business and society.

So we ARE cooperating in every movement that will put advertising on a

higher plane and make it more efficient. Recently we conducted in the larger cities a 6-months course in Publishing and Advertising which was attended by over 1000 employees of our various papers, and for which the students paid over \$60,000.00.

As an organization we are active members of The Associated Advertising Clubs of the World, Chamber of Commerce of U.S.A., and of the Audit Bureau of Circulations. Our members are solidly behind every movement for better merchandising and better selling.

A B P Standard No. 9
"To avoid unfair competition."

FAIR-PLAY is ingrained in the American character, and it is one of the practical working standards of The A B P, Inc. It is enforced too—if someone's foot slips a little, he is brought back into line with kindly but insistent firmness.

Concretely, our idea of fair competition is to see who can build the most, not who can tear down the most, but this involves no easy tolerance of evil practices whether in publishing or the fields we serve.

If you have read the preceding advertisements in this series, you will begin to understand that the A B P papers are of superior merit, because they are built upon the solid rock of right principles.

THE ASSOCIATED BUSINESS PAPERS, INC.

JESSE H. NEAL, *Executive Secretary*

HEADQUARTERS:

220 WEST 42nd STREET

NEW YORK CITY

The Manufacturers Record is a Member of the A. B. P., Inc.

PROPOSALS

BOND ISSUES
BUILDINGS
PAVING
GOOD ROADS

Bids close September 10, 1923.

U. S. Engineer Office, Montgomery, Ala. Sealed proposals will be received here until 11 A. M. Sept. 10, 1923, and then opened, for three 80'x26'x5', and three 60'x22'x4' steel barges. Further information on application.

Bids close Sept. 20, 1923.

U. S. ENGINEER OFFICE, WILMINGTON, N. C., August 22, 1923. Sealed proposals will be received here until 12 M., September 20, 1923, and then opened for removing the wreck of the Schooner JOSEPHINE. Further information on application.

Bids close September 19, 1923.

DEPARTMENT OF INTERIOR, WASHINGTON, D. C., AUGUST 21, 1923. Sealed proposals (in duplicate) will be received at the Department until 2 o'clock p. m., Wednesday, September 19, 1923, for the construction of the Pathological Laboratory, Freedmen's Hospital, Washington, D. C., in accordance with the drawings and specifications, copies of which, with form of proposal, may be had on application to the Department. A certified check payable to the order of the Secretary of the Interior in the sum of \$25 will be required as a guaranty for the safe return of the plans loaned. The right is reserved to reject any or all bids, waive technical defects, accept one part and reject the other, as the interest of the Government may require. Proposals must be securely enveloped, marked "Proposal for Construction of the Pathological Laboratory, Freedmen's Hospital", and addressed to the Secretary of the Interior, Washington, D. C. F. M. GOODWIN, Assistant Secretary.

Bids close September 4, 1923.

\$50,000 6% Coupon Notes ST. LUCIE COUNTY, FLA.

Fort Pierce, Fla. Sealed bids will be opened on September 4, 1923, for \$50,000 Six per cent. semi-annual coupon Public Road and Bridge Negotiable Notes of St. Lucie County, Florida. Principal and interest payable to bearer at United States Mortgage & Trust Company, New York City, N. Y. Said notes mature, two notes on August 1 of each year 1925 to 1934, and three notes on August 1 of each year 1935 to 1944. For further information address P. C. Eldred, Clerk of the Board of County Commissioners.

Bids close Sept. 3, 1923.

\$175,000 Road Warrants

Dade City, Fla. The Board of County Commissioners of Pasco County, Florida, will receive sealed bids up to noon, September 3, 1923, for \$175,000 road warrants issued for Highlands Special Road and Bridge District, bearing date of October 1, 1923, and maturing on October 1 of the years and in the amounts, respectively, as follows: 1925, \$2000; 1926 to 1929, inc., \$3000 each year; 1930 to 1933, inc., \$4000 each year; 1934 to 1937, inc., \$6000 each year; 1938 and 1939, \$8000 each year; 1940 and 1941, \$10,000 each year; 1942 and 1943, \$14,000 each year; 1944 to 1946, inc., \$19,000 each year; 6% interest, payable semi-annually on April 1 and October 1; both principal and interest payable in New York. A certified check for \$1000 payable to B. A. Thomas, Chairman Board of County Commissioners, under the usual conditions, must accompany each bid. The Board reserves the right to reject any and all bids.

A. J. BURNSIDE,
Clerk.

Bids close September 5, 1923.

\$36,000 Public Improvement Bonds

Weldon, N. C. Sealed proposals will be received by the Board of Commissioners of The Town of Weldon, North Carolina, at the Town Hall in said Town until the 5th day of September, 1923, at 8 o'clock, P. M., when they will be publicly opened, for the purchase of \$36,000 Public Improvement Bonds of The Town of Weldon. The bonds will be dated

RATE: 35 cents per line per insertion.

PUBLICATION DAY: Thursday.

FORMS CLOSE 4 P. M., Monday.

DAY LETTER: When too late to send copy by mail to reach us by 4 P. M. Monday, forward by day letter.

THE DAILY BULLETIN OF THE MANUFACTURERS RECORD:

Published every business day; gives information about the industrial, commercial and financial activities of the South and Southwest.

The Daily Bulletin can be used to advantage when copy cannot reach us in time for publication in the Manufacturers Record before bids are to be opened, or when daily publications are necessary to meet legal requirements.

The same rate applies—35 cents per line per insertion.

September 1, 1923, will bear interest at a rate to be hereafter determined, payable semi-annually on March 1st and September 1st, will be of the denomination of \$1000 each, and will mature serially, one bond on September 1st in each of the years 1923 to 1945, inclusive, and two bonds on September 1st in each of the years 1946 to 1953, inclusive. The bonds will be coupon bonds, with privilege of conversion into fully registered bonds. Principal and interest will be payable in gold coin of the United States, at Hanover National Bank in the City of New York, and interest on registered bonds will, at the option of the holder be paid in New York exchange.

Bidders are invited to name the rate of interest which the bonds are to bear. The rate per annum named must be a multiple of one quarter of one per centum. The bonds will be awarded to the bidder offering to take them at the lowest rate of interest. As between bidders naming the same rate of interest, the amount of the premium will determine the award.

Proposals must be enclosed in a sealed envelope marked on the outside "Proposal for Bonds" and addressed to E. L. Haywood, Town Clerk, Weldon, North Carolina. Bidders must deposit with said Town Clerk before making their bids, or present with their bids, a certified check drawn to the order of the Town of Weldon, upon an incorporated bank or trust company, or a sum of money for or in an amount equal to two per centum (2%) of the face amount of bonds bid for, to secure the municipality against any loss resulting from a failure of the bidder to comply with the terms of his bid. Purchasers must pay accrued interest from the date of the bonds to the date of delivery. The bonds cannot be sold at less than par and accrued interest.

The bonds will be prepared under the supervision of the United States Mortgage and Trust Company of New York City which will certify as to the genuineness of the signatures and the seal impressed thereon.

Successful bidders will be furnished with the opinion of Messrs. Reed, Dougherty & Hoyt, of New York City, that the bonds are valid and binding obligations of The Town of Weldon.

Dated August 21st, 1923.

E. L. HAYWOOD,
Town Clerk.

Bids close October 2, 1923.

Mermentau River Bridge

Baton Rouge, La.

Sealed proposals will be received by the LOUISIANA HIGHWAY COMMISSION, at its offices in the Raymond Building, Baton Rouge, Louisiana, up to 12 o'clock noon Tuesday, October 2nd, 1923, at which time and place they will be publicly opened, for the construction of a Highway Bridge and approaches over the Mermentau River at Mermentau, Louisiana, to be known as the Mermentau River Bridge, Federal Aid Project No. 122.

Construction consists of one channel span 320 feet, riveted through trusses, 20 feet clear roadway, 20 feet high above high water elevation and resting on concrete piers 54 feet high on pile foundations. The plans for the Approach Bridging have been prepared for two alternate types.

Alternate "A" consists of a series of 39 foot reinforced concrete deck girder spans resting on reinforced concrete open bents and pile foundations, 7 spans on the east end and 10 spans on west end of bridge. Alternate "B" consists of a series of 19 foot creosoted timber spans on creosoted piling, 16 spans on east end and 27 spans on west end of bridge.

The earth embankment approaches and gravel surfacing, on the same, containing approximately 30,000 cubic yards Earth Borrow and 1200 cubic yards gravel surfacing are to be constructed at the same time the bridge is being constructed but under separate contract.

The entire project will be divided into two Sections: Section "A" will be earthwork approaches and Section "B" will be bridge proper. Bids may be submitted on either or both Sections and on either or both types of Approach Bridging.

Information as to the location, character of work, extent and class of material, terms of payment, regulations governing manner of submitting proposals and executing contract, may, on application be obtained at the office of the Louisiana Highway Commission, Raymond Building, Baton Rouge, Louisiana. Plans and specifications may be inspected at the office of the commission in Baton Rouge or will be furnished upon receipt of \$5.00 as payment therefor, not to be refunded.

J. M. FOURMY,

State Highway Engineer.
W. T. PETERMAN, Chairman,
Louisiana Highway Commission.

Bids close Sept. 10, 1923.

Street Improvements

Sanford, Fla.

Sealed proposals will be received by the City Commission of Sanford, Florida, at their offices in the City Hall, at or before 3 P. M., September 10, 1923, for grading, draining, and paving the following streets, to-wit:

| | |
|--|----------------|
| Cypress Ave. from Union to Ninth St. | 4686 Sq. Yds. |
| Commercial St. from Park to Palmetto Ave. | 1153 Sq. Yds. |
| French Ave. from Ninth St. to Lake Monroe | 10990 Sq. Yds. |
| Mellonville Ave. from Celery Ave. to R. R. | 2412 Sq. Yds. |
| Park Ave. from Fulton St. to Lake | 2541 Sq. Yds. |
| Sixth St. from Magnolia to Laurel Ave. | 2982 Sq. Yds. |
| Seventh St. from Magnolia to Mellonville Ave. | 4994 Sq. Yds. |
| Sanford Ave. from Tenth St. to City Limits | 13914 Sq. Yds. |
| West First St. from Mill Creek west to City Limits | 15845 Sq. Yds. |
| Tenth St. from Park to Myrtle Ave. | 1617 Sq. Yds. |
| Ninth St. from Cypress to Sanford Ave. | 436 Sq. Yds. |

Total 61570 Sq. Yds.

Proposal to be presented in a sealed envelope, endorsed on the outside "Bid for Paving" Sanford, Florida, and the name of the bidder or bidders.

Each proposal must be accompanied by a certified check, made payable at sight, to the order of the City of Sanford, Florida, for 3 per cent of the amount of their bid.

The successful bidder or bidders will be required to give a bond equal to 50 per cent of his or their bid, and such bond to be executed by surety company licensed to do business in the State of Florida, said bond to be approved by the City Commission.

Copies of the plans and specifications may be seen at the office of the City Manager or at the office of Fred T. Williams, Engineer. Plans and specifications may be obtained at either office on deposit of \$10.00 which will be returned if a bid is made.

The City Commission reserve the right to reject any or all bids, or to accept any bid they deem to be for the best interest of the city.

W. B. WILLIAMS,
City Manager.

Bids close September 18, 1923.

Water-Works Improvements

McAlester, Okla.

Sealed proposals will be received by the City of McAlester, Oklahoma, up to 3:30 o'clock P. M. of the 18th day of September, 1923, for the furnishing of all material and labor required in the construction of certain water-works improvements. The approximate quantities of which are as follows:

- SEC. I—FLOWLINE
12,900'-24" Flow Line
SEC. II—FILTERS
3—One Million Gal. Filters
SEC. III—BUILDING
Filter and Pump Building
SEC. IV—PUMPS
2—1400 G.P.M. Duplex Power Pumps
2—1400 G.P.M. Centrifugal Pumps
SEC. V—RESERVOIR
Two Million Gal. Conc. Reservoir.
SEC. VI—PIPE LINES
12,980'-14" Cast Iron Pipe
26,360'-12" Cast Iron Pipe

Plans and specifications on file for examination at the office of the City Manager and City Clerk, McAlester, Oklahoma and at the office of the Engineers, E. T. Archer & Company, New England Building, Kansas City, Missouri, who will furnish prospective bidders with bidders blanks, without charge.

Individual copies of the plans and specifications will be prepared for those requesting same, with the understanding that they will be returned at or before the time of letting, for the use of which a nominal fee of \$5.00 per Section will be made and one-half refunded upon the return of plans and specifications.

All bids must be made out on bidders blanks and be accompanied by a certified check, drawn on some known responsible bank, in a sum equal to 5% of the amount of the bid, guaranteeing the bidder entering into a contract for the work, and furnishing the necessary bonds within a period of fifteen days thereafter.

The Board of Commissioners reserves the right to reject or accept any bid without explanation.

W. E. BEATY, Mayor.

CHAS. H. HESS, City Manager.

ROSE D. EWENS, City Clerk.

E. T. ARCHER & COMPANY,
Consulting Engineers,
Kansas City, Missouri.

Bids close September 15, 1923.

Sewers

Norfolk, Va., August 27, 1923.

Sealed proposals will be received at the office of the City Manager until 12 o'clock noon, Saturday, September 15th, 1923, for laying sewers and building manholes in Sections "A," "B" and "C," Ocean View District, City of Norfolk. The work aggregates approximately the following quantities:

| | |
|---------------------|-----------------|
| 20" C. I. Pipe..... | 600 lin. ft. |
| 4" T.C. Pipe..... | 6,000 lin. ft. |
| 8" T.C. Pipe..... | 20,000 lin. ft. |
| 10" T.C. Pipe..... | 5,000 lin. ft. |
| 12" T.C. Pipe..... | 10,000 lin. ft. |
| 15" T.C. Pipe..... | 4,500 lin. ft. |
| 18" T.C. Pipe..... | 6,000 lin. ft. |
| 24" T.C. Pipe..... | 700 lin. ft. |

Manholes 140
Inspection Boxes 42

A complete schedule of the work, specifications, and proposal blank can be had at the office of the Director of Public Works. Bids must be made on the proposal blank, sealed and addressed to Col. W. B. Causey, City Manager, Norfolk, Virginia, and marked "Ocean View Sewer Proposal, September 15th, 1923."

A certified check on some approved bank, in the sum of One Thousand Dollars (\$1,000.00), made payable to B. Gray Tunstall, City Treasurer, must accompany each bid. The City of Norfolk reserves the right to reject any or all bids.

WALTER H. TAYLOR, 3rd.
Acting City Manager.

Bids close September 11, 1923.

Storm Sewers

Laredo, Texas, Aug. 16, 1923.

Sealed proposals will be received by L. Villegas, Mayor of Laredo, Texas, until Tuesday, Sept. 11th, 1923, at 7:30 o'clock P. M., for furnishing materials and constructing storm sewers and appurtenances.

The approximate quantities are:
Earth excavation 30708 cu. yds.
12" vitrified pipe 6800 ft.
15" vitrified pipe 12654 ft.
18" vitrified pipe 1867 ft.
21" vitrified pipe 2112 ft.
24" vitrified pipe 4683 ft.
30" segment block sewer 1230 ft.
33" segment block sewer 1870 ft.
36" segment block sewer 2425 ft.
Man holes 60

Each bid will be accompanied by a certified check for five-hundred (\$500.00) dollars, drawn in favor of the City Treasurer of Laredo, Texas.

Plans and specifications may be seen at the office of S. F. Creelius, Civil Engineer, 211 Alexander Building, Laredo, Texas, after September the 1st, 1923.

The City reserves the right to reject any or all bids.

L. VILLEGAS,
Mayor.

Bids close September 24, 1923.

Sanitary Sewers

St. Petersburg, Fla.

Sealed proposals for construction of Sanitary Sewers will be received at the office of the Director of Finance of the City of St. Petersburg, Florida, until 7:30 P. M., September 24th, 1923.

Approximately 138,610 feet of 6 to 21 inch sewer pipe, 395 manholes.

Plans and specifications may be obtained from the Director of Finance upon deposit of \$15.00 which will be refunded upon return of the plans in good condition within 10 days after bids are received. Each proposal must be accompanied by a certified check made payable to the Director of Finance for 5 per cent of the amount bid. City reserves the right to reject any or all bids.

H. T. DAVIS,
Director of Finance.

Bids close September 14, 1923.

Sewer Construction

WASHINGTON SUBURBAN SANITARY DISTRICT CONTRACT 37-S

Washington, D. C.

Sealed proposals for Contract 37-S will be received at the office of the Washington Suburban Sanitary Commission, Evans Bldg., New York Ave., Washington, D. C., until 3 P. M., Eastern Standard Time, Friday, September 14, 1923, for constructing 16,500 feet of 6-inch to 18-inch sewers and appurtenances.

Plans obtainable after August 29, from Robert B. Morse, Chief Engineer of District, Hyattsville, Md., on returnable deposit of \$5.

T. HOWARD DUCKETT,
EMORY H. BOGLEY,
J. BOND SMITH,
Commissioners.

Bids close October 9, 1923.

Municipal Building Plans

OFFICIAL NOTICE

Bluefield, W. Va.

Sealed proposals will be received at the office of the City Manager until two o'clock P. M., October 9, 1923, for furnishing plans and supervising the construction of a new municipal building.

Each proposal shall be accompanied with tentative pencil plans incorporating the general information concerning the approximate cost, the size of the building, contents, etc., furnished upon application to the City Manager. It being understood that there shall be no charge for this service in connection with the furnishing of preliminary data herein called for. The award will depend upon the most favorable design and proposition offered, and the Board of Directors reserves the right to reject any and all proposals.

CLARENCE E. RIDLEY,
City Manager.

Bids close September 17, 1923.

Garbage Incinerator

St. Petersburg, Fla.

Sealed proposals for the construction of an incinerator to incinerate garbage at the rate of 80 tons in 10 hours will be received at the office of the Director of Finance of the City of St. Petersburg, Florida, until 7:30 P. M., September 17th, 1923.

Proposals will be received on designs by Incinerator Companies and upon designs prepared by the City. Separate proposals will be received for the construction of the furnaces, the re-inforced charging floors with approaches and roof, and the 115-foot chimney in the City design.

Plans and specifications may be obtained upon deposit of \$25.00 which will be refunded upon return of the plans in good condition within 10 days after receiving bids.

Each proposal must be accompanied by a certified check made payable to the Director of Finance for 5 per cent of the amount bid. City reserves the right to reject any or all bids.

H. T. DAVIS,
Director of Finance.



CLASSIFIED OPPORTUNITIES

MINERAL AND TIMBER LANDS WATER POWERS, MISCELLANEOUS PROPERTIES

IRON MINES, Fluorspur coal, oil leases, for sale or lease, west Kentucky.

W. S. Lowery,
Salem Star Route, Marion, Ky.

COAL LANDS AND MINES

FOR SALE—COAL MINE Birmingham, Ala. territory; 320 acres in fee and can lease 1180 acres additional. Owners should construct two miles railroad and put in washer, making entire investment less than \$60,000. Properly managed easily clear 100% annually. Plenty of labor and easy control. Reason for selling owners live elsewhere and can't leave other interests. Don't answer unless you mean business and have capital. J. M. Head, Andalusia, Ala.

RATES AND CONDITIONS

Rate 30 cents per line per insertion. Minimum space accepted, four lines. In estimating the cost, allow seven words of ordinary length to a line. When the advertisement contains a number of long words, proper allowance should be made. Terms: Invariably cash with order; check postoffice or express order or stamps accepted. No display type used. Questionable or undesirable advertisements will not be accepted. The assistance of our readers in excluding undesirable advertisements is requested. We reserve the right to refuse any advertisement. No patent medicine, oil or mining stock advertisement accepted. Rate for special contracts covering space used as desired within one year as follows: 100 lines, 28c. per line; 300 lines, 26c. per line; 500 lines or more, 25c. per line.

COAL LANDS AND MINES

FOR SALE—Mine located both Louisville & Nashville and Southern Railway. Jellico seam, present capacity 400 tons per day, terms if desired. For further details address Dr. E. A. Guynes, 513 Walnut Street, Knoxville, Tenn.

TIMBER AND TIMBER LAND

TIMBER LAND FOR SALE—1700 acres of nice white oak timber, in Washington County, Maryland. Will cut about five million feet. Address No. 6206, care Manufacturers Record, Baltimore, Md.

FOR SALE—Over one thousand acres of timber oak, pine, and hickory, located in Cherokee Co. Ga. on L. & N. R. R. 50 miles N. of Atlanta. Will sell by boundary only. James F. Faulkner, Ball-Ground, Ga. Rt. 5.

TIMBER AND TIMBER LAND

TIMBER FOR SALE

About 8 million feet Pine and Hardwood timber near Augusta, Ga. Can be bought right. Or land and timber can be bought. H. R. Powell & Son, Realtors, Augusta, Ga.

FARM, FRUIT, AND TRUCK LANDS

CALIFORNIA

FOR SALE OR EXCHANGE—248 acres in Tehama County, California, free of all debt; will take \$25,000 or accept Florida or Georgia property. Here is a chance for someone to clean up. Address No. 6197 care Manufacturers Record, Baltimore, Md.

FLORIDA

FOR SALE—Choice colonization tracts, timber and farm lands in Northwest Florida at prices from \$5.00 to \$25.00 per acre. Also houses, hotels, apartments, bungalows and lots for sale in the Sunshine City of St. Petersburg, Florida. For particulars address, Jones & Yates Realty Company, 201 Sumner Building, St. Petersburg, Florida.

FLORIDA—Playground of the Rich; Paradise of the poor. The fastest developing State in the Union, and Roger Babson, the great business statistician, says that TAMPA is destined to be the greatest city in the Southeast. Come and be one of us. We have a Home, Grove or Farm for you. Send today for booklet "Largest Orange Tree in the world." and list. Tampa-West Coast Realty Co., (Inc.) Opp. Post Office, "Since before the war." Tampa, Fla.

GEORGIA

WANTED to sell well improved farm, with all equipment, at Rogers, Ga., on main line Central Railway, of 3860 acres for One Hundred and Fifty Thousand Dollars, part terms, or to correspond with some firm who will cut into small units and sell to home seekers. Address T. Z. Daniel, Millen, Ga.

MEXICO

TWO LARGE DEVELOPED MINES in Mexico that are priced to sell; one gold, the other lead, zinc and silver. Reports sent on request. A. H. Blinbry, Box 827, El Paso, Texas.

SOUTH CAROLINA

SECLUSIVE BUILDING SITES perfectly drained on deep water. Large acreage in magnolias, live oaks, palmettoes, and Southern pines. Situated on three-mile expanse of water. Excellent health. Pure artesian water. Winter temperature 57.2 degrees. Roses and other flowers bloom in mid-winter. Five miles to railroad station. Excellent neighborhood. Ideal for winter homes. Fishing and hunting. If interested, write

LAKE REALTY COMPANY,
Beaufort, S. C.

TEXAS

TEXAS—8000 acres of fine farming land located on South Plains the finest cotton and corn land in the South, will grow anything that is grown in California except citrus fruit. Finest watered country there is in the state. Price \$11 per acre. Address, John Vaughn, Plainview, Texas.

BUSINESS OPPORTUNITIES

WE PUBLISH a weekly bulletin listing new foreign specialties and processes in all lines for which American manufacturing rights or exclusive selling agency are open. Subscription \$25 per quarter year. Exclusive items coming from our own correspondents throughout world. If interested address Box 24, Station F, New York.

COMPLETELY and elegantly equipped office with balance of lease for sale or rent to May 1st, 1924, for out of town manufacturer desiring good location in New York. Occupant prepared to represent manufacturer if desired. S. Churchill, 152 West 42nd St., Knickerbocker Bldg., New York City.

RARE OPPORTUNITY — Offered party who will make substantial investment in a company desiring to put into production and distribution a much simplified but sturdy type of wheel tractor which can be built for less than \$500 and by test will out-pull other tractors now selling at \$1750. Investigation by principals only solicited and references exchanged. Partridge Tractor Co., 410 Masonic Temple, Jacksonville, Fla.

BUSINESS OPPORTUNITIES

I SPECIALIZE in industrial, warehouse and business sites at and adjacent to Washington, D. C.

M. B. HARLOW,
Harlow Building, Alexandria, Va. Colorado Building, Washington, D. C.

AN EXCEPTIONAL OPPORTUNITY.

Offered party who will make substantial investment in an Engineering and Construction Company operating in Southwest and desiring to enlarge operations.

Address: Apartment Four, 328 West Missouri St., El Paso, Texas.

WANTED—Partner with executive ability as manager to take half interest in an established manufacturing business in city of 60,000 population in Virginia; this will require \$3000 to handle; this position nets a salary of \$50 per week the year around. Please do not take up our time unless you have the money and mean business. Address No. 6203 care Manufacturers Record.

OPPORTUNITY to acquire manufacturing and sales rights on Patented Bolted Steel Tank construction—proven practical for many purposes. Address No. 6208, care Manufacturers Record, Baltimore, Md.

FINANCIAL

**SOUTHERN
MILL STOCKS
BANK STOCKS
BONDS**

25 years' experience in this field.

F. C. ABBOTT & CO.,
Charlotte, N. C.

VALUABLE TEXT-BOOKS on the "Money Question"—The most vital question affecting the welfare of the people. The Monetary Educational Bureau, Kellogg Bldg., Washington, D. C.

INDUSTRIES WANTED

"INMAN, S. C., wants industries, large and small. Offer cheap power—healthful climate—good labor conditions. Address Inman Chamber of Commerce, Inman, S. C.

FAYETTE, ALA., wants INDUSTRIES, large or small. Fine location for cotton mill, Tannery, Box and Veneer Factory. Good labor conditions, cheap power, healthy climate, on railroad, in center of cotton and lumber section. Address, Chamber of Commerce.

ALTAVISTA, VIRGINIA

A live town.

Two railroads, Virginia City basic freight rate.

Free manufacturing sites. Staunton River passes through the town. We invite you to look us over.

CHAMBER OF COMMERCE

HERNDON, VA., the best location in Northern Virginia for young enterprises that intend to grow. What do you make that the farmers, the dairymen and the fruit growers need for the production and distribution of their output? We offer railroad, large electric power and water facilities. Eight miles from Superpower plant site at Great Falls. Address Chamber of Commerce.

INDUSTRIAL PLANTS

UP-TO-DATE GREY IRON and brass foundry property, fully equipped to make castings up to ten tons each, also pattern shop. Now operating profitably with contented American labor in progressive southeastern Pennsylvania city. Owners have other and older interests on which they wish to concentrate. If desired, will retain interest. Address No. 6207, care Manufacturers Record, Baltimore, Md.

FOR SALE—MANUFACTURING PLANT IN JERSEY CITY SUITABLE FOR FOUNDRY AND MACHINE SHOP ON CENTRAL RAILROAD OF NEW JERSEY. ABOUT 90,000 SQUARE FEET UNDER ROOF ON APPROXIMATELY FOUR AND ONE-HALF ACRES. MAJORITY BUILDINGS RECENTLY CONSTRUCTED. FOR DETAILS APPLY

THE M. W. KELLOGG COMPANY
JERSEY CITY, N. J.

INDUSTRIAL PLANTS

COMPLETE 50 TON daily capacity Fullers Earth Products Manufacturing plant. Can be seen in operation. Machinery and buildings good as new, has an unlimited amount of earth, 60 ft. vein, 3 to 6 ft. from top earth. Fullers Earth for sale \$10 per ton f. o. b. Texas. Address G. W. Scheuing, 1018 Wyoming Street, San Antonio, Texas.

FOR SALE OR RENT. One Reinforced steel concrete warehouse, electric elevator, mill constructed, sprinklered, containing 60,000 square feet floor space located in the city of Atlanta, Ga., close in on Southern Railroad. Insurance rate \$1.25 per thousand per annum. Ideal building and location for storage of any kind. Will rent space, lease or sell entire plant. Manget Bros. Company, Newnan, Ga.

FACTORY SITES

FOR SALE—FACTORY SITES in best diversified successful manufacturing city in United States. Warren Ross Lumber Co., Jamestown, N. Y.

For Sale
MANUFACTURING SITE
on Railroad and Water
Hastings Bros., Norfolk, Va.

MANUFACTURING SITE—We have unlimited supply of natural gas which we will furnish at less than a fourth of what you are paying and give you free site at good town. Box 311, Louisville, Ky.

PATENT ATTORNEYS

PATENTS—TRADEMARKS—INVENTORS SHOULD write for our free Guide Books, List of Patent Buyers and RECORD OF INVENTION BLANK before disclosing their inventions. Send model or sketch and description of your invention for our free opinion of its patentable nature. Highest references. Reasonable terms. **VICTOR J. EVANS & CO.,** 712 Ninth, Washington, D. C.

PATENT SENSE

"The Book for Inventors and Manufacturers." FREE. WRITE LACEY & LACEY, Dept. 15, Washington, D. C. Est. 1869.

INVENTORS—Send sketch or model of your invention, for opinion concerning patentable nature, and exact cost of applying for patent. Book, "How to Obtain a Patent" sent free. Gives information on patent procedure and tells what every inventor should know. Established 25 years. Chandler & Chandler, 412 7th St. N. W. Washington, D. C.

PATENTS—Booklet free. Highest references. Best results. Promptness assured. Watson E. Coleman, Patent Lawyer, 624 F St., Washington, D. C.

PATENTS AND PATENT CAUSES—Searches; Applications; Reports on questions of validity and infringement. Development, design, manufacture and contracts. Registered Patent Attorney; Member American Society of Mechanical Engineers. **ARTHUR SCRIVENOR,** Mutual Building, Richmond, Va.

AGENCIES WANTED

A WELL ESTABLISHED MANUFACTURER of a high class building product which has been, and is being used on many of the country's most important engineering and architectural projects, wants sales-engineering representation in Atlanta, Birmingham, Nashville, New Orleans, Charleston, Memphis, and other southern centers. Commission basis. Our proposition would be interesting to other non-competing manufacturers who want an additional line to market through architects, engineers and contractors, as well as to sales-engineering organizations who are not manufacturers. Address No. 6204 care Manufacturers Record, Baltimore, Md.

RESPONSIBLE New York Sales Company in business 10 years will handle additional lines, technical preferred, on commission, also carry accounts. Address D. D., Room 1176, Woolworth Bldg., N. Y. City.

MANUFACTURERS' AGENT for mechanical machinery, and architectural material, territory Maryland and Virginia. W. J. Spencer, 410 Bond Bldg., Washington, D. C.

SITUATIONS WANTED

MANUFACTURING EXECUTIVE: American, 33 years' old, married, technically trained, 12 years' experience in manufacturing covering design, estimating, purchasing, planning, scheduling, production, inspection and industrial engineering of quantity production products, such as ammunition, fishing tackle, cutlery, flashlights, batteries, phonograph records, pressed metal products, stampings, etc. desires position. Address No. 6200 care Manufacturers Record, Baltimore, Md.

TERRITORY MANAGER—Have had 17 years experience as salesman and sales manager, calling on wholesale trade of South, have covered all territory from Va. to Texas. At present employed and have lucrative position but best of reasons for change. Would be glad to hear from any manufacturer who desires first-class representation from high calibre salesman. References given and required. Please state full particulars in first letter. Address No. 6209, care Manufacturers Record, Baltimore, Md.

MEN WANTED

WANTED SASH AND DOOR SALESMAN—We want an A-No. 1 high-class salesman, one who knows the Sash, Door and General Millwork business and is acquainted with contractors and dealers in North and South Carolina who handle sash, doors, etc. We have a good position to offer the man who can deliver the goods and can show a clean past record. References required. Address Willingham Sash and Door Company, Macon, Georgia.

MEN WANTED

Salaried positions \$2500 to \$25,000 upward; executive, technical, administrative, engineering, manufacturing, professional managing, financial, etc., all lines. If you are qualified, and receptive to tentative offers for a new connection you are invited to communicate in strict confidence with the undersigned, who will conduct preliminary negotiations for such positions. A method is provided through which you may receive overtures in confidence, without jeopardizing present connections, and in a manner conforming strictly to professional ethics. Send name and address only; preliminary particulars will be sent without obligating or compromising you in any way. R. W. Bixby, Inc., 403 Lockwood Building, Buffalo, N. Y.

BIG MONEY FOR HUSTLERS

An Unusual Opportunity for a few high grade men or firms to act as distributors for patented article backed by highly rated established company. This article is nationally advertised, known in every state, and used by the country's largest firms. Enables them to get more power at less cost using same machinery. All or part time men acquainted with engineers, factories, ice companies, railway mechanical executives, machine shops, preferred. Write for application blank. Box 502, Wellston, St. Louis, Mo.

MEN WANTED

WANTED—An experienced superintendent for millwork plant working 100 men. A good position for right man. Give age, experience and references. Lumber Co., Box 668, Greensboro, N. C.

MACHINERY AND SUPPLIES

BOILER—For Sale—One 66-inch x 16-ft. return tubular boiler, Schofield make, in good condition. Address Box 1178, Columbus, Ga.

TRACTORS—New Model W Cleveland Tank Type Tractors for sale cheap account of changing business. Address Box 135, Anderson, S. C.

FOR SALE.

One Sturtevant Roll, new, with two million tons 54% iron ore, close to switch. C. G. Samuel, Athens, Tenn.

FEED MILL MACHINERY—Alfalfa grinder, chop mill, oat crimper, batch mixer, shafting, pulleys, elevators—complete 50-ton plant. Will sell all or any part. List and price on request. GRENADA FEED MILLING CO., Grenada, Miss.

MACHINERY AND SUPPLIES WANTED

Wanted
Lithograph Machinery
And Supplies
Send full information to
No. 6210 care Manufacturers Record
Baltimore, Md.



SPECIAL ADVERTISEMENTS OF GENERAL INTEREST

OPPORTUNITIES

Industrial and Agricultural

The A. & W. P.—W. Ry. of Alabama and Georgia Railroads traverse a territory rich in material and potential resources. Attractive industrial sites. For information apply:

**Commercial & Agricultural
Dev. Dept.—Above Lines
Atlanta, Georgia**

AN UNUSUAL OPPORTUNITY

Is offered to purchase a series of one story buildings with tools and machinery and full line of auto material and parts, including wheels, springs, axles, carburetors, motors, etc. Buildings appraised at \$57,000.00; machinery and tools \$32,000.00; material \$201,000.00. Can be bought at great bargain. Fine opportunity for experienced manufacturer to establish auto plant or plant for manufacturing bodies. Situated in Middle Atlantic States. Fine distributing point on three trunk line railways and plant immediately on main line with spur track. Your inquiry and investigation invited.

Address A-307 care of Manufacturers Record
Baltimore, Md.

FOR SALE

PIPE SECOND HAND All Sizes ½" to 24"

Furnished with new threads and couplings, suitable for every practical purpose.

Also large assortment of Contractors' Equipment, Hoisting Engines, Boilers, Concrete Mixers, etc.; all thoroughly overhauled.

MARINE METAL & SUPPLY CO.
167 South Street NEW YORK

WANTED

Asphalt Foremen, Rakers and Tampers

An asphalt plant foreman thoroughly experienced handling Trinidad asphalt. Also want experienced street foreman, three asphalt rakers and two tampers. 150,000 yards sheet asphalt. Job starts September 15th. State experience and salary wanted in first letter.

HOGAN CONSTRUCTION CO.
Little Rock, Ark.

FOR SALE AT LESS THAN 90 CENTS PER SQUARE FOOT INCLUDING IMPROVEMENTS AT NEW ORLEANS, LA.

Two and one half solid squares of property in the heart of the commercial and industrial district, immediately adjoining and back of docks operated by Board of Port Commissioners and served by switch track. Full particulars on application.

W. S. BENDER, Realtor
1016 Maison Blanche Bldg. New Orleans, La.

IDEAL BUILDING FOR LIGHT MANUFACTURING FOR SALE

Steam heat and electric power. Located in town having three railroads. Plenty labor—both male and female. Living conditions very reasonable. A wonderful opportunity for a firm looking for new location or desiring an additional plant.

Correspondence invited with owner

STANLEY BLISS Earlville, N. Y.

Your Reference Library Is Incomplete Without BLUE BOOK of SOUTHERN PROGRESS

A survey of Southern resources and development
in agriculture, industry, commerce, and finance.

Single Copies 50c

MANUFACTURERS RECORD - - Baltimore, Md.

"Make It In ALABAMA"

JACKSONVILLE has—

Population 2395.

County Population, 47,822.

80% White Population.

Farm Products—Corn, Cotton, Oats, Wheat, Potatoes.

3000 Bales Cotton annually.

Minerals—Clays, Brown Hematite, Barites.

Two Railroads.

Good Highways.

Freestone Water.

Water System.

Low Tax Rates.

FREE FACTORY SITES.

Fine Labor Conditions.

Living Conditions Unexcelled.

Churches and Good Schools.

Fine Upstanding Citizenship.

Abundant Hydro-Electric Power.

Jacksonville Offers Many Advantages for Investment

*Friendly, Helpful Co-operation
Extended to New Industries*

JACKSONVILLE, ALABAMA, is in the center of one of the most prosperous sections of the State—farming is diversified—certain minerals, yet undeveloped, abound—great tracts of timbers are nearby. Railroads and highways afford excellent transportation facilities.

**There is Opportunity for Cotton
Mill, Ice Plant, Bottling Works
and Other Diversified Industries**

Ideal living conditions—plentiful supply of native white and colored labor—wonderful climate—Ample source of hydro-electric power.

Interested parties will be supplied with more definite information and extended every co-operation relative to locating in this city. Address

**Secretary, Chamber of Commerce
JACKSONVILLE, ALABAMA**

SAMUEL T. FREEMAN & COMPANY, Auctioneers
1519-21 Chestnut Street - - - - Philadelphia, Pa.

COMMITTEE'S LIQUIDATION SALE

**Valuable Surplus Real Estate, Machinery and Equipment
OF THE**

BADENHAUSEN BOILER CO., Cornwells, Pa.

Monday and Tuesday, September 17th and 18th, 1923 At 10 A.M. each day (Daylight Saving Time)

On the Premises

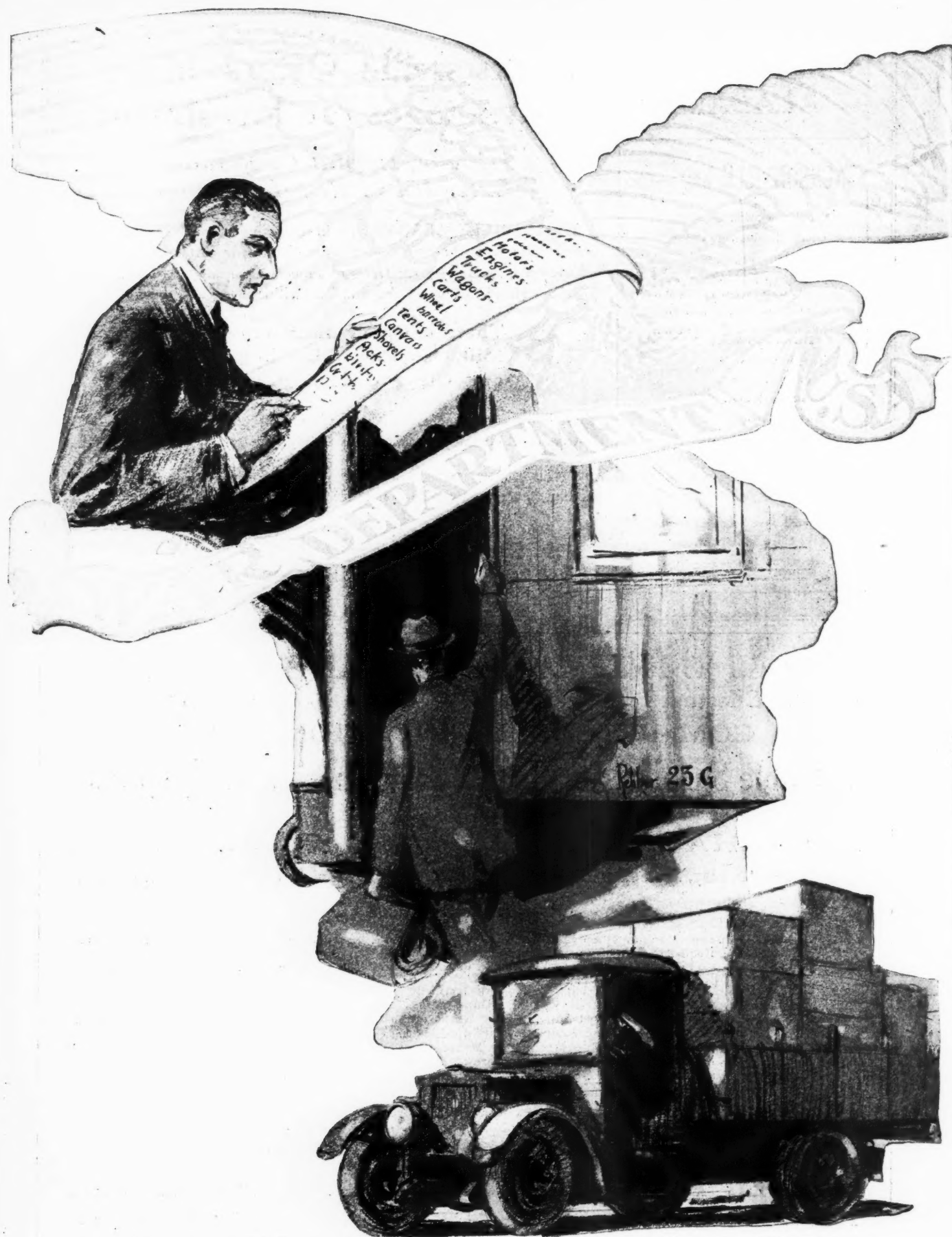
REAL ESTATE—Modern Machine Shop and tract 400 x 830 ft. with railroad siding, also a valuable manufacturing site on State Road 475 x 1466 ft., also a valuable manufacturing site adjoining State Road, with sand and gravel pits, 400 x 1455 ft., also tract of 21¾ acres extending from State Road to the Delaware River.

MACHINERY & EQUIPMENT—Comprising valuable assortment of heavy machine Tools, including Radial Drills, Multiple Spindle Drills, Cold Saws, Bull Riveters, Gang Drills, Power Punches, Air Compressors, Generator Sets, Locomotive Crane, Steam Hammers, Hydraulic Presses, Lathes, Boring Mills, Grinders, Pipe Cutters 5, 10 and 30-ton Traveling Cranes; Machine Shop completely equipped with Planers, Engine, Turret and Screw Cutting Lathes, Grinders, Shapers, Woodworking Machinery, Motors from 1 to 50 H.P., large quantity of small tools of every description, small equipment, Nuts, Bolts, Screws, Rivets, large tonnage of Scrap Iron, I-Beams, etc.; modern Office Furniture, Typewriters, Sanitary Desks, Chairs, Filing Cabinets; also 2 frame Farmhouses and a frame Mansion House.

NOTE: The Machinery and Equipment will be sold at Peremptory Sale in piecemeal lots only.

[Illustrated catalogs mailed upon application to

SAMUEL T. FREEMAN & COMPANY, Auctioneers
1519-21 Chestnut Street - - - - Philadelphia, Pa.



Investigating a Government sale of surplus property is just as easy as any buying investigation

"Red Tape!" "Surplus Property Sales conducted by government!" "Surplus Property Sales full of Red Tape!"—are conclusions drawn by some business man.

The facts are War Department Sales are so simply operated that any business man who does not at least investigate may overlook many worthwhile opportunities.

Sales are conducted at conveniently located points. They are advertised well in advance. There is full opportunity for investigation. Merchandise is carefully listed. Only a small deposit is required.

To investigate just what may suit your needs is just as easy as making any market trip—in fact, easier, for it means concentration of buying effort in one spot.

The range of materials offered is great. Average prices as set by buyers are so uniformly low and sales are conducted with so much dispatch, that the investigator can use his time profitably.

Your Government is doing a good job for you as a man in business and as a tax payer. Don't be deterred by imaginary red tape. Surplus Property Sales are conducted on a business basis.

Investigate, and through investigation participate in a gigantic enterprise out of which you can profit directly, just as you profit as a taxpayer indirectly.

The Way to Investigate

Watch your Commercial Business Publication and the Metropolitan Dailies for announcements of specific auction or sealed bid sales.

Send for the Catalog mentioned in the announcement.

Check off the items that interest you.

Send a representative to the sale to inspect the materials—in advance, if possible.

To ensure you more leeway, send your name and address at once to Major J. L. Frink, Chief, Sales Promotion Section, Room 2515, Munitions Building, Washington, D. C. Advise him the character of materials you are interested in, and catalogs containing such materials will be forwarded you as rapidly as sales are scheduled.



Final commodity sales will begin in September and continue until liquidation of stocks is completed at the Quartermaster Depots in Brooklyn, Chicago, San Antonio and San Francisco. Offerings include a wide range of Quartermaster Supplies, Ordnance Property and smaller quantities of Engineer Property, Chemical Warfare and Medical and Hospital Supplies.

Important sales of Real Estate, Buildings, Plants and Warehouses will be held at Camp Devens, Ayer, Mass.; Ordnance Reserve Depot, Amato, N. J.; Ordnance Reserve Depot, Toledo, O.; Camp Knox, Louisville, Ky. and Camp Lewis, American Lake, Wash. Definite dates will be announced later.

Look for the Eagle before you shop.

WAR DEPARTMENT

"Make It In ALABAMA"

LINEVILLE has—

Population 1517.
County Population, 25,000.
Farm Products—Anything
grown in South.
5000 Bales Cotton annually.
Minerals—Graphite, Gold,
Pyrites, Limonite, Mica,
Kaolin, Copper. Many un-
developed.
Two Railroads.
Excellent Highways.
Fine Climate.
Healthful water.
TAX EXEMPTION to New
Industry.
Plenty of Labor.
Noted for Good Churches,
Fine Schools.
Thrifty, Intelligent Friendly
Citizens.
Low Living Costs.
On Main Transmission Lines
Alabama Power Company.

Lineville Has Buildings For New Industries

Overall Plant and Canning Factory Needed

LINEVILLE, ALABAMA, offers attractive location for the establish-
ment of new industries, such as—

Overall Factory, Textile Mills, Canning Factory, Furniture and Woodworking Plants.

Lineville also offers ample sites and buildings for almost any industries.
An inexhaustible source of every farm product that is grown in the South;
timber and minerals in abundance.

90% white population, affording ample source of native white labor, con-
tended peaceful and happy. Finest living conditions and climate.

*Active co-operation and information to
any interested parties, upon application.*

**Secretary, Chamber of Commerce
LINEVILLE, ALABAMA**

To the MANUFACTURER and DISTRIBUTOR

Abundant supplies of coal, coke, iron, timber and other
raw materials lie in the regions of Georgia and Ala-
bama, which are traversed by the

Central of Georgia Railway

Cheap electric power, numerous undeveloped water-
powers, good home markets and excellent shipping
facilities. Therefore, manufacturing conditions are
ideal.

Many of the cities on the Central of Georgia Rail-
way occupy advantageous positions for distributing
warehouses, and a number of the larger northern and
eastern manufacturers supply their southeastern trade
from branch houses in these cities.

Full and detailed information upon application.

J. M. MALLORY, General Industrial Agent
233 West Broad Street
SAVANNAH, GEORGIA

99% AMERICAN LABOR

Keeps the Wheels of Industry in motion at

COLUMBIA, S. C.

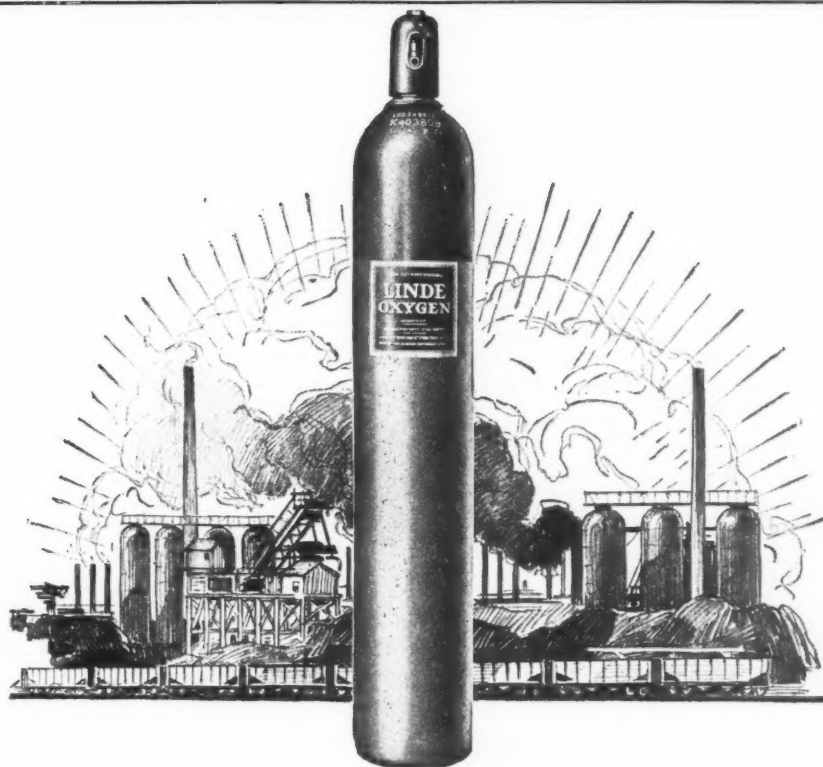
Textile is largest industry with
NO STRIKE
Record in history of City

Over 6,000 Contented Employees

**Ideal conditions for both
skilled and unskilled labor**

Investigation for your particular needs by

COLUMBIA CHAMBER OF COMMERCE



Linde Engineering Service for Linde Users

Linde users seldom fail to save time and money by availing themselves of Linde Engineering Service.

Better standards of practice are often suggested. New applications are pointed out. The vexing problem may be a common one which Linde has helped to solve many times.

The field work with Linde users is carried on through the District

Sales Office in that locality, and is based upon the vast knowledge of the whole Linde organization in the uses of oxygen, resulting from many years' experience. The resources of the Linde Engineering Staff and Research Laboratories are called upon when necessary.

For your convenience 31 plants and 58 warehouses

THE LINDE AIR PRODUCTS COMPANY
Carbide and Carbon Building, 30 East 42d St., New York City

The Largest Producer of Oxygen in the World

District Sales Offices:

Atlanta
Baltimore
Boston
Buffalo

Chicago
Cleveland
Dallas

Detroit
Kansas City
Los Angeles
Milwaukee

New Orleans
New York
Philadelphia

Pittsburgh
San Francisco
Seattle
St. Louis

LINDE OXYGEN

For better concrete - **SLAG**



Six million dollar
Atlanta-Biltmore
Hotel; Schultze &
Weaver (New York),
architects; Starrett
Bros., Inc. (New
York), contractors.

*For better concrete---the
engineers and contractors of
Atlanta-Biltmore Hotel chose*

"ENSLEY" & "ALA CITY"
BASIC SLAG
CRUSHED & SCREENED

Atlanta's need for another hotel is being met with the twelve-story Atlanta-Biltmore which is now under construction.

The contractor's need for a coarse aggregate of utmost bonding qualities—to assure maximum tensile and compression strength in the concrete—is being met with our puddled and scientifically prepared Basic Slag.

*Slag
Concrete
is practically
Everlasting!*

This luxurious hostelry occupies a full half city block, towers twelve stories above the street and contains 560 guest rooms. In size, appointments and cost it easily takes first place among the distinguished hotels of the Southeastern states.

Birmingham Slag Company
Slag Headquarters for the South
ATLANTA BIRMINGHAM THOMASVILLE

